USAID
FROM THE AMERICAN PEOPLE

USAID KOSOVO COMPETE ACTIVITY

SECTOR ASSESSMENTS

Wood Processing, Information and Communications Technology, and Food Processing

USAID Kosovo Compete Activity

SECTOR ASSESSMENTS

Wood Processing, Information and Communications Technology, and Food Processing

USAID Kosovo Compete Activity

SUBMITTED BY:
CARDNO EMERGING MARKETS USA, LTD.

SUBMITTED TO:
USAID MISSION IN KOSOVO

CONTRACT NO.:
72016720C00001

USAID ACTIVITY OFFICE:
ECONOMIC GROWTH OFFICE

USAID COR:
FLORA ARIFI

ORIGINAL SUBMISSION DATE:
JANUARY 21, 2021

REVISION SUBMISSION DATE:
FEBRUARY 15, 2021

TABLE OF CONTENTS

LIST OF FIGURES

1. INTRODUCTION TO THE USAID KOSOVO COMPETE ACTIVITY

USAID Kosovo Compete Activity (hereinafter referred to as "Compete" or "Activity") is a five-year activity that began on August 11, 2020. The purpose of the Activity is to promote resilient, self-sustaining market systems, and to facilitate the private sector's improved competitiveness in local, regional, and global markets. The Activity utilizes a market systems approach aligned with USAID's Private Sector Engagement Policy.

Compete focuses on three key export-oriented sectors—Wood Processing; Information and Communications Technologies (ICT); and Food Processing—to sustainably increase competitiveness. By working to address constraints across the system, the Activity will enable scalable and systemic change, stimulate job creation, and foster the private sector's increased ability to engage in local, regional, and international markets. The expected results of the Activity across all three sectors are: 1) market systems are strengthened to increase sector competitiveness; and 2) market actors within those market systems are more productive and competitive.

2. METHODOLOGY

Compete synthesized information from several sources to develop the assessments of the three focus sectors. This proceeded as follows:

- As a starting point, Compete used the initial analyses submitted during the proposal stage with key information on main industry players, estimated number of jobs, key export markets, and opportunities for growth and exports.
- During the drafting of the Market System Constraint Analysis (MSCA), Compete collected additional information – where available – on export trends in key segments of its focus sectors. This included Kosovo Customs data on exports through the end of 2019.
- Also, during the drafting of the MSCA, Compete consulted with key companies and industry associations in the focus sectors concerning the scope of the impact of the COVID-19 pandemic on their respective industries. Although little quantifiable data exists concerning pandemic impacts, these consultations offered a *qualitative* accounting of industry *perceptions* by key market players and respective associations.
- In January 2021, Compete reviewed the latest published Kosovo Customs data on indicators related to export of wood and food processing products for 2020 (data not available for ICT service exports). This additional data allowed Compete to update its assessment of the focus sectors.

3. SECTOR ASSESSMENTS

3.1 WOOD PROCESSING

3.1.1 SECTOR OVERVIEW

The wood processing industry in Kosovo is an important economic sector with a growing ability to serve local and international markets. The wood industry's competitiveness has been improving due to the growing adoption of modern production technologies by key industry participants. This has translated into substantial growth in sales in both domestic and export markets. Based on interviews with two of the country's largest machinery suppliers, Compete estimates that wood processors in Kosovo invested close to €30 million in technology adoption over the past five years.

Technological upgrading has also been accompanied by growth in the number of companies in the sector, an expansion of employment in response to growing market opportunities, and an upward trend in the growth of exports. Exploiting price differentials, Kosovo's exports of wood products to Switzerland, Germany, Belgium, and the Scandinavian countries increased at an estimated Compounded Annual Growth Rate (CAGR) of 31.9% over the period 2015 – 2019. Importantly, the already existing and established linkages with export markets have acted as a cushion for many businesses in the sector to absorb the shocks of the COVID-19 pandemic, although no data is currently available to make a concrete assessment of the magnitude of this effect.

The economic potential of the industry is significant. The wood processing sector is comprised of a large number of small- and medium-sized enterprises (SMEs), with an increasing number of medium-sized firms. Leading exporting companies include BINNI (furniture, exports to Europe), Ciao Berto (furniture, exports to Europe), PALMA (furniture, exports to Europe), Elnor (furniture, exports to Germany through Producers Sales Agent), and SHEHU (furniture, exports to Europe). A prior USAID activity (EMPOWER Private Sector) supported and partnered with 16 medium-sized firms[1] in the sector. Several smaller firms[2] are also close to becoming medium-sized (exceeding €1million per year in export sales). This increasing capacity is enhancing Kosovo's ability to scale production to meet future demand.

There are three other critical factors that add to the industry's growing competitiveness potential, namely: 1) proximity to EU and Swiss markets; 2) the presence of a sizable Albanian diaspora which is heavily engaged in the construction and renovation industry in those markets; and 3) an established but growing local base of skilled designers and architects who are feeding the growth of the "contract furniture" subsector of the industry.

Important segments of the wood processing sector have shown business dynamism and vibrancy, manifested in part through a growing interest and capacity by industry firms to participate in

---

[1] Palma, BINNI, Sela Impex, Elnor, Ukaj, Albed, TC, Ciao Berto, Mob Prishtina, Lumi, Te Naseri, Euro-Modeli, Graniti, Tiki, Mob Idrizi, and Loni Dekor

[2] Including Dekoriti, Doni, Dekra, Hoti, and Greenhouse

leading international fairs (e.g., IMM, MOW and SwissBau), and an increased frequency in the presentation of sector opportunities by companies in various B2B events in the EU market.

Export opportunities have been critical for spurring collaboration within the wood processing industry as well as between wood processing and other industries. Kosovo wood processors have continued to increase their competitiveness through supplying Swiss and German markets with finished wood products. Producers in the sector are entering a new era of inter- and intra-sectorial cooperation and coordination across all actions related to exports. For instance, there are growing firm collaborations between wood processing companies and also with metal, glass, and leather (apparel) companies. Intra-sectorial collaboration is growing, especially in tackling issues in logistics and transportation, addressing gaps in skills availability, improving coordination for joint presentations in international markets (including international fairs), and greater participation in and communication through the industry association (the Association of Wood Processors of Kosovo).

There is a strong commitment and interest by industry actors to collaborate to overcome sector constraints and challenges. The industry's main sector association, the AWPK, is regarded as one of the most consolidated and proactive business associations in Kosovo, representing over 100 companies, around half of which pay regular membership fees. Over the past decade, the sector has made progress addressing several significant challenges. These include improved product quality, technology upgrades across all chains of production, improved working conditions and facility maintenance, including the slow but gradual adoption of lean management, improved promotion and marketing (in the domestic market only), and strengthening skills upgrading in critical technological processes such as computer numerical control (CNC) and machine usage. Many of the challenges addressed by the industry were often the result of individual initiatives and business acumen of its entrepreneurs, aided considerably by the support of key international donors.

With respect to the industry's level of employment, there is an evident lack of verifiable data, with estimates varying significantly. According to estimates developed by Compete's subcontractor Recura (and confirmed by AWPK), there are about 6,000 workers in the industry, inclusive of production, installation, sales, and showrooms. Other more optimistic estimates discussed with industry representatives put the employment figures at between 8,000 and 10,000 workers.

Despite significant inroads and its still-untapped potential, the wood processing industry continues to face challenges in improving its access to export markets. Such challenges and constraints include: a) the lack of a visa liberalization regime with the Schengen zone which is complicating the process of visiting potential and actual buyers regularly; b) challenging delivery and installation of Kosovo-made products in the EU and Switzerland, especially due to challenges facing Kosovo workers to legally work in such markets (made worse during the COVID-19 pandemic); c) lack of promotion of the industry in export markets (besides fairs); d) limited direct links between the industry and international buyers and supply chains; e) limited understanding of consumer behavior and trends in international markets; and f) lack of skilled labor, and systemic failures in the skill provision system in Kosovo.

Additionally, there are challenges related to inclusiveness, as the sector is traditionally male-dominated (only an estimated 10.3% of employees are women) and has a low level of inclusion of minorities. Men generally own wood processing companies, whereas women face significant challenges securing collateral for bank financing.

3.1.2 EXTERNAL MARKET OVERVIEW

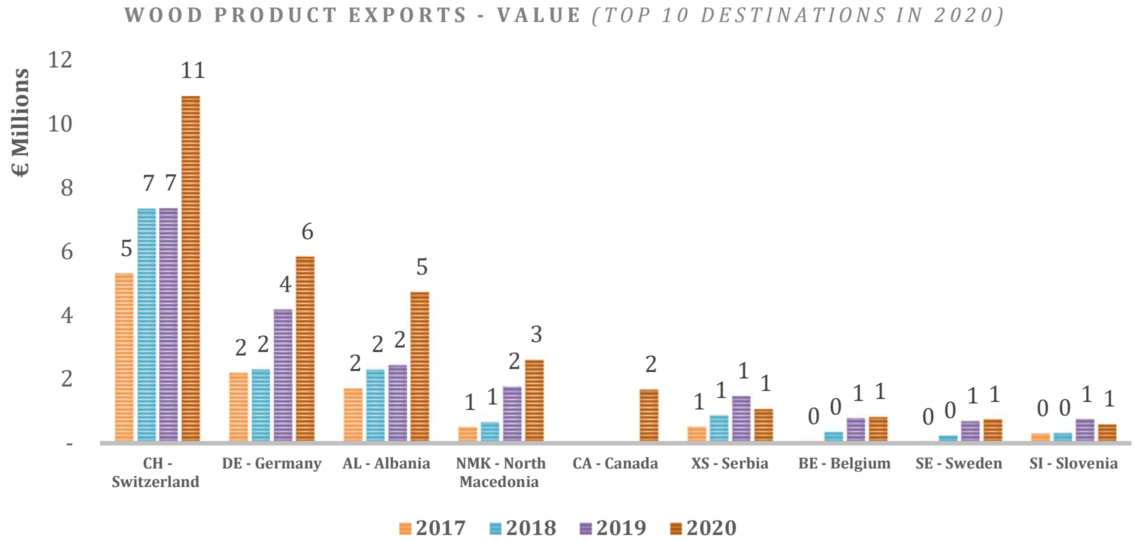
Companies in the wood processing industry continue to struggle in operating at the frontiers of technological optimization. Foreign counterparts are much better consolidated to operate at the bottom end of their cost curves, in part due to their larger size and leveraged economies of scale. Local wood producers' competitive advantage lies in *tailored production*, supply of small-scale custom orders, and in the proximity of Kosovo to the regional and EU markets. Part of the competitiveness of some local wood processors therefore is their ability to produce and deliver products faster than some of their larger competitors. For example, customized producers of kitchen cabinets in Kosovo are able to ship to Switzerland in three weeks following the order; this is often not possible for IKEA and other larger sellers.

Kosovo has several free trade agreements and related instruments, including the Stabilization and Association Agreement with the EU, the bilateral free trade agreement with Turkey, and preferential treatment with Switzerland. These could facilitate the wood processing industry increasing its presence in international markets and gradually build its capacities to serve as a growing manufacturing supplier of wood/furniture products such as kitchens, cabinets, windows, and bedrooms. This is especially the case for the Swiss and German markets, which jointly represent a market of more than 90 million people. To take advantage of this potential, the sector will require improved coordination and cooperation at all levels by public and private actors in the wood processing sector's wood sector market system. This will only happen if these actors jointly address gaps that currently prevent the industry from taking full advantage of its growth potential in export markets.

3.1.3 CURRENT EXTERNAL MARKETS IN THE WOOD PROCESSING SECTOR

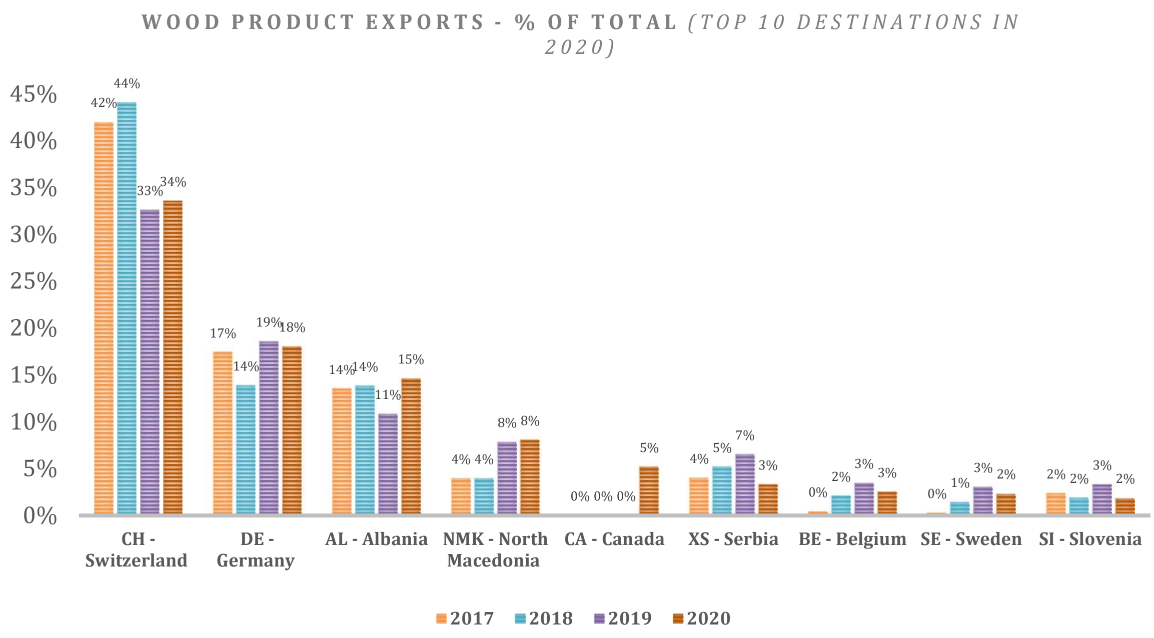
Based on the review of selected Kosovo Customs data, in 2019, Kosovo exported over €22.5 million in product categories classified as "wood and articles of wood, and wood charcoal" and "furniture, beds, mattresses, mattress holders, pillows and bedding, lamps and lighting fixtures." Under these broad categories, the top export markets in 2019 (by export value) were Switzerland, Germany, Albania, North Macedonia, Serbia, and Belgium. Put in percentage terms, the In 2019, Swiss and German markets accounted for over half of all wood-related exports in the above-mentioned categories. In 2020, the exported value of the same categories rose to €32.4 million, while the top export markets remained Switzerland, Germany, Albania, and North Macedonia.

Figure 1: Top export destinations of select Kosovo wood products, by nominal € value



Source: Kosovo Customs

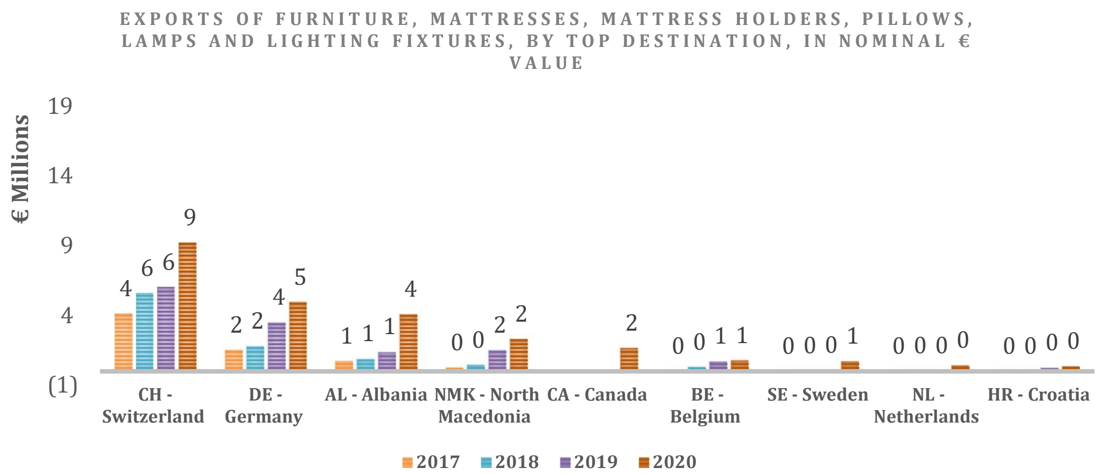
Figure 2: Top export destinations of select Kosovo wood products, by share of total exports in those categories



Top export markets for Kosovo wood furniture products and related articles are Switzerland and Germany, which also show a positive growth trend. Kosovo Customs data shows that exports of "furniture, beds, mattresses, mattress holders, pillows and bedding, lamps and lighting fixtures" to Switzerland were over €6 million in 2019, up from €5.6 million in 2018, and €4.1 million in 2017. In 2020, these exports rose further to €9 million. Similarly, exports of the same category in 2019 were €3.5 million in Germany, up from €1.8 million the previous year, and €1.5 million in 2017.

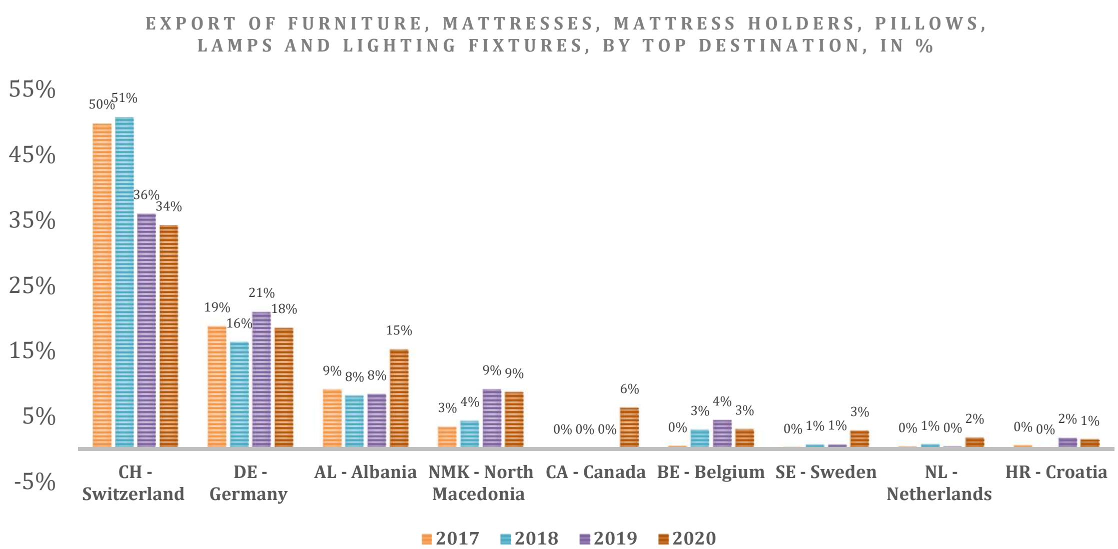
In 2020, exports of this category in Germany rose to €5.8 million. In general, the share of the Swiss and German demand constituted close to half of the total demand for this category in 2020.

Figure 3: Export of selected wood-related products, by destination, in nominal € value



Source: Kosovo Customs

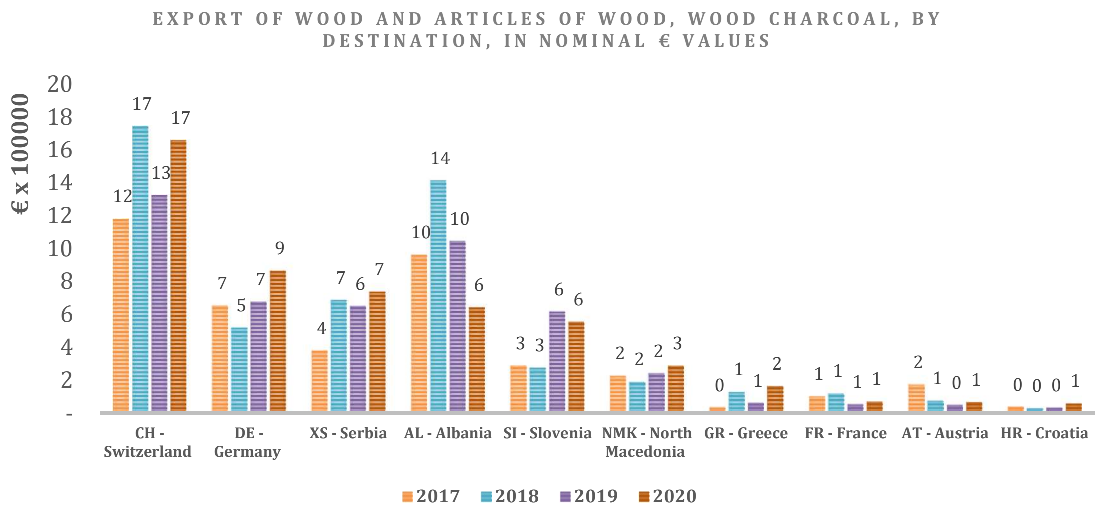
Figure 4: Export of selected wood-related products, by destination, in %



Source: Kosovo Customs

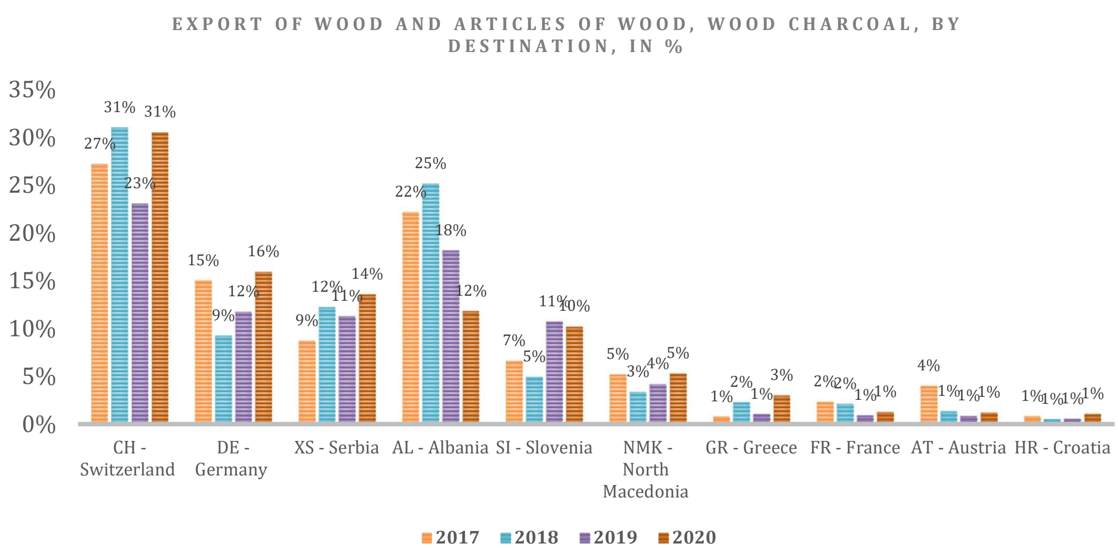
According to Kosovo Customs data, exports of "wood and articles of wood, and wood charcoal" amounted to €5.7 million in 2019, up from €4.3 million in 2017. However, such exports *dropped* to €5.4 million in 2020. Under this category, Switzerland, Germany, Serbia, and Albania are the top export destinations. In 2019, exports to Switzerland under this category constituted 23% of total exports, followed by 18% to Albania 12% to Germany, and 11% to Serbia. In 2020, exports to Switzerland were close to a third of the total under this category (31%), followed by 16% into Germany, 14% into Serbia, and12% to Albania.

Figure 5: Export of selected wood and articles of wood, by destination, in € value



Source: Kosovo Customs

Figure 6: Export of wood and articles of wood, by share in top destinations, in %



Source: Kosovo Customs

3.1.4 DIASPORA DEMAND

A critical source of foreign demand for Kosovo wood products and furniture rests with the large Albanian diaspora community in the EU and Swiss markets. Members of the Kosovo diaspora, especially in Germany and Switzerland, often visit Kosovo and order furniture from the local producers. Often, the Kosovo diaspora community consider end consumer prices for the types of products that are of interest to them to be bargains in Kosovo compared to Germany and Switzerland. Part of this relates to the fact that annual travel to Kosovo to visit their families is leveraged as an opportunity to also purchase locally produced furniture (a process which in 2020 was negatively impacted by the COVID-19 pandemic).

Expanded serial production is possible for solid wood furniture and upholstered products as a way to compete in export markets, but flat furniture producers are competing based on tailored products and designs. This also means that certain smaller-scale buyers are willing to pay a premium to get flexibility for products that are attuned to their individual needs, which is part of the reason there is diaspora-based foreign demand for tailored products and designs. Customized products by foreign producers in the EU market can be accessed at a much greater premium, hence, this is part of the reason behind the fueling diaspora-based demand for small-scale, customizable orders from Kosovo producers. Contract furniture is price competitive, including the quality of the production, since all projects are unique, require attention to detail, and are more flexible with timing and responding to continuous changes/modifications of the projects during implementation. The presence of Kosovo wood processors in the EU and Swiss markets with large diaspora communities is limited to the processors' showrooms or sales agents. This results in significant loss of demand opportunity, which is an area that requires attention and support in the future.

3.1.5 TRENDS IN THE END MARKET SIZE AND PREFERENCES

Typically, by virtue of their adopted technology, serial production companies are focused on mass production and not on tailored production. New designs that Kosovo wood processing companies are offering in domestic and export markets appear to be correlated with a greater frequency of furniture replacements in apartments located in EU residences, especially those owned by diaspora. In past years, diaspora's acquisition of apartments and real estate was accompanied by the purchases of Kosovo-made furniture. Additionally, the majority of foreign buyers of Kosovo-made furniture and wood products are diaspora companies in export markets that are engaged in the construction industry and in the renovation of older apartments.

Another important factor that adds to foreign demand for Kosovo-made furniture is the presence of key Kosovo Albanian diaspora members in top managerial positions in EU-based and Swiss companies. Such individuals play an important role in positioning Kosovo and its producers across many sectors, not just wood processing. They serve as great advocates for Kosovo-made products. These individuals conduct economic diplomacy on behalf of Kosovo and bring their teams and business partners to Kosovo to visit and analyze potential opportunities.

Kosovo wood processors have limited information about end market trends in the wood processing industry. Local producers are currently implementing projects that are either developed by designers or are simply based on the preferences of the buyers when they visit showrooms in Kosovo. At the industry and company level, there is a lack of awareness of design and sourcing trends.

In interviews, wood processing sector companies expressed their strong belief that designs, technology and proximity to the EU and Switzerland are strengths of the industry. These strengths however, are dampened by the lack of installation capacity and infrastructure, including lack of permanent presence and limited capacity to prepare and compete for large contracts in these markets. These weaknesses prevent the sector from accessing export markets. For instance, it is estimated that a large share of local producers and companies currently do not have the requisite administrative resources to prepare procurement-related documentation to compete for large bids in the EU and Switzerland. This is relevant for the biggest wood processing companies in Kosovo, who would likely invest further in installation and administrative resources if faced with concrete opportunities. The latest investment expansion of Kosovo wood processing company Ciao Berto, happened exactly when their biggest buyer in Switzerland, Lika Group (a diaspora construction company), offered Ciao Berto an opportunity to furnish their apartments and houses that they built in Switzerland. Lika Group is procuring directly from Kosovo producers, as they have their installation teams in Switzerland. Local producers are able in some cases to serve as subcontractors, but lack of official registration with branches in EU markets hampers their inclusion in bidding consortia by larger companies.

3.1.6 COMPETITIVENESS OF KOSOVO WOOD PROCESSORS IN EXPORT END MARKETS

Kosovo wood processors are becoming increasingly competitive in the segment of tailored furniture and wood products. The majority of the solid wood subsector products are exported with an estimated €5 million of exports annually, including wooden houses. The local tradition of treating solid wood and the quality of the raw material is the key to success. Kosovo solid wood products are also price competitive in the EU markets. Competitiveness also stems from access to quality raw materials, pockets of trained workforce inherited from ex-Yugoslavia times, and geographic proximity. The possibility for small and often custom-made orders is another reason for the selection of Kosovo for present and future supply.

3.1.7 ROLE OF DIASPORA

Diaspora is the driving force behind the foreign demand for Kosovo wood and furniture products and is the backbone of the Kosovo wood-processing sector. The sizable Albanian diaspora community in the EU and Switzerland presents a significant source of foreign demand for Kosovo wood processors. There are a number of reasons for this demand, listed below.

First, a significant part of the demand stems from the individual orders diaspora members place while visiting their family in Kosovo, usually in the summer. This particularly applies to articles of home furnishings that are often a much better bargain in Kosovo than in EU countries, even when accounting for shipping costs.

Second, flat furniture producers often compete based on tailored products and designs, which sell at a premium price. This allows local Kosovo producers to substitute their limited ability to produce at scale with their ability to produce custom-made products cheaper, given the much lower labor costs. With cultural links to Kosovo, diaspora community members are willing to pay a premium to get the necessary flexibility for a product that is attuned to their individual needs and taste.

Customized products by foreign producers in the EU market are much more expensive, which is part of the reason fueling diaspora-based demand for small-scale, customizable orders from Kosovo producers. Such contract furniture production is price competitive, including the quality of the production, since all projects are unique, require attention to detail and are more flexible with timing and response to continuous changes/modifications of the projects during implementation. The challenge is that, with exception of few larger producers, Kosovo wood businesses lack access to these markets through either showrooms of sales agents. This results in significant loss of demand opportunity, which is an area that requires attention and support.

There is an opportunity to further explore diaspora investment in existing Kosovo businesses and joint investment in establishing new export-focused businesses. However, for such opportunities to materialize, Kosovo wood companies need to undergo a painful process of company restructuring, including eliminating the semi-formal parts of the business that are done for smaller buyers, primarily in cash. Having Kosovo companies gradually embrace modern management tools, including an increased willingness to move toward modern corporate governance would send an important signal of trust and credibility that is needed to lure in investment interest by diaspora in the form of joint ventures. Currently, Albanian diaspora members who embark on materializing their business ideas in Kosovo typically undertake investments by themselves, while also struggling to understand and navigate the locally inefficient bureaucracy that poses significant regulatory hurdles.

A good example of many opportunities in the wood sector involving diaspora is the production of modular houses. A productive relationship between diaspora and local businesses (i.e. the *Greenhouse* company) resulted in successful investment that improved local knowledge and stimulated further investments in such businesses in Kosovo. This group of businesses is now becoming a new export driver and is expected to significantly increase its exports within the next five years. Also, there is a sufficient supply of diaspora members in the EU and Swiss markets who have acquired skills in the installation of the houses, including installation of electricity, water, roofs and garden works. Such increased know-how and skill upgrading has created a foundation for further expansion and investment in diversifying to other products for such businesses in diaspora. The modular houses business is having a significant positive impact on other smaller producers in Kosovo that are part of the value chain, including producers of kitchens, doors, windows and staircases.

The fastest way for cooperation with the diaspora is their direct presence in EU and Swiss markets through sales points/showrooms, which can be individual or a combination of collaborating companies in Kosovo. This model has already proven successful. USAID EMPOWER Activity supported Mahagoni company from Peja through a joint investment to open its first showroom in Zurich, Switzerland, and after only two years, the company has already opened another showroom in Vienna, Austria. Particularly important for this segment are tailored products, especially kitchens. Another option for accessing these markets is through utilization of sales agents and greater digitalization.

Kosovo producers of doors and windows are already present through sales partners in the EU and Swiss markets, but not at the desired level. Unlike kitchen producers, this group is producing products that are less sensitive to customization demands, since many of them use standardized dimensions. The participation of these companies in trade fairs and direct presentation of this group in mainstream media, social media, and direct presentation to construction companies in EU and Switzerland is crucial for increasing export and the greater involvement of diaspora.

Contract furniture business in Kosovo is already dependent on diaspora demand. Although this segment is growing slow, there are significant opportunities in the EU and Swiss markets since Albanian diaspora is heavily involved in the HoReCa businesses in targeted countries. Cooperation between Kosovo producers and architects/interior designers in the targeted countries is increasing and the presentation of their projects in social media, in particular, is generating more interest. Also, their finished projects (hotels, restaurants and bars) in the EU and Switzerland are the best promotion of their work since the architects/interior designers can visit and check their quality and products before deciding to engage Kosovo producers.

Most importantly, famous diaspora-based designers and architects are regularly promoting their work by emphasizing that a crucial part of the design and production is based in Kosovo. This type of work can be a great marketing and promotion tool for Kosovo producers. A notable example in this regard is that of the renowned, London-based diaspora member, Perparim Rama, an architect and designer, whose projects are winning awards across Europe and beyond. Most of Mr. Rama's projects are produced and to some extent also designed in Kosovo.

3.1.8 IMPACT OF THE COVID-19 PANDEMIC

Most of the companies in the wood processing sector stopped production during the initial months of the COVID-19 lockdown. Following the first few weeks of the lockdown, during which all companies were closed, some exporting companies resumed work with limited resources. Gradually, all companies started resuming production, initially with small and limited capacities.

Most of the country's borders were closed during initial lockdown. After three weeks of lockdown, the first trucks with wood products were dispatched to export countries. This constituted a promising signal for local producers who could at least count on a limited but open export channel, especially since the domestic market had ground to a complete halt following the onset of the COVID-19 pandemic. Delays in raw material sourcing had a short-term effect on wood processing companies, but based on discussions with companies, this did not appear to constitute a major problem, since many companies had already secured sufficient storage for up to three months. This, in itself, indicates a degree of inventory planning throughout the industry that bodes well for the industry's adaptability and resilience in the long-term.

When industry realized that the transportation and shipment of goods was possible during the initial months of the pandemic, exporting companies in the wood processing sector started developing plans to resume exports immediately. The Activity's knowledge of the industry indicates that some wood processing companies were loading trucks for exports on a fairly frequent basis. Reduced EU imports from China and Asia, a result of the pandemic, is believed to have created more demand for some Kosovo wood products and a few exporting companies increased their production and exports.

Another segment that experienced a positive trend during the COVID-19 pandemic was online sales and demand. People were spending the majority of their time at home due to movement restrictions, and thus online purchasing was the safest (and sometimes only) option. Therefore, a few companies from Kosovo that were exporting and selling online were not as affected by the situation created by COVID-19.

The biggest challenge faced by the companies in the initial weeks of the pandemic was the hesitation of employees to resume work in factories due to safety concerns. Employee absence affected productivity immediately and companies started reorganizing production with a smaller group of workers and in some cases with workers who were younger and felt safe and fit to resume production. Companies were forced to apply measures for protecting workers and disinfecting the workplace regularly.

Some companies reportedly took additional operational measures aimed at improving workplace safety, including increasing the distance between workers on the factory floor. Additionally, several companies reportedly decreased their workforce, especially companies that were more heavily reliant on the domestic market.

Another aspect that affected productivity was the closure of kindergartens and schools. This disruption manifested itself in the inability of some workers to dedicate time to their jobs, as they had to care for their children. Architects, sales staff, designers, and even factory floor workers were directly affected by lockdown measures. Even though no concrete data exists, it is believed that the situation had a major negative impact on the income of this segment of the workforce, considering the fact that their engagement was occurring on a limited and part-time basis.

As a direct result of the pandemic, reduced or cancelled orders were another challenge faced by wood processing companies, particularly those focused in the domestic market. This situation was expected to improve by summertime, when members of the diaspora usually visit Kosovo and generate demand for furniture due to the acquisition of new apartments or renovation of existing dwellings. However, given the prolonged pandemic – including a summer spike in COVID-19 cases in Kosovo that required diaspora visitors to self-quarantine when returning to their country of residence – limited arrivals by diaspora further strained demand and production.

It was only in June 2020 that the domestic market was beginning to return to some level of normality, but demand remained limited and the pandemic situation remained precarious. Currently, most companies report an average estimated 25% drop in demand. Notably, the Government of Kosovo's economic rescue package was limited to the initial measures adopted in the early stage of the pandemic, with a follow-on support package just recently receiving approval in parliament. Many wood processing companies appear willing to retain the majority of workers if the government were to step in and institute a publicly subsidized retention scheme, especially for the period December 2020 – March 2021, which it is assumed will be hard on the domestic economy.

In the initial stage of the pandemic, most of the wood processing companies encountered an immediate pause on both international and domestic payments for both completed and ongoing work. During March – May 2020, the pandemic was particularly affecting the construction industry, including renovation and HoReCa in targeted export markets. Shipments initially halted, which in turn started impacting cash turnover. In general, this led to problems with having sufficient liquidity, with banks remaining as the only option. Most of the companies postponed loan repayments to banks and a few wood processing companies reportedly were forced to take new obligations (loans) to overcome liquidity constraints.

From July 2020, the export market recuperated to some extent. The improved prospects were coupled with the restarting of work in the construction industry in Kosovo. Both of these external and internal developments supported the improvement the otherwise dire conditions across the Kosovo economy.

The months of December 2020 through to March 2021, are expected to be the most challenging for the industry. There is expectation that there will be support from the government and other international donors to help serve as a bridge, especially for companies oriented towards the domestic market, until the pandemic is brought under control through pharmaceutical interventions.

Many wood processing companies express significant dissatisfaction with the government's lack of proactive measures to support the private sector. The private sector is particularly dismayed at what it considers as failures to support the business community, which is critical in contributing to state budgets through taxes. Importantly, the perceived neglect is often contrasted with the public sector, whose staff is regarded to have stable salaries during the pandemic-induced recession. Recently, AWPK, and other associations initiated an advocacy initiative to amend certain bylaws and give priority to domestic producers in all government procurements, even if bidding prices were to be higher. Similar actions have been implemented by some countries in the region, including Bosnia and Herzegovina.

The pandemic has led to significant problems related to travelling to meet new and existing buyers. Due to the travel ban and border lockdowns, all pre-agreed timelines for meeting buyers and taking measurements for installation projects in the EU were either canceled or postponed. Such a situation exacerbated a long-running challenge for local producers and exporters who have already had to contend with the lack of visa liberalization regime.

More specifically, until July 2020, few if any of the company representatives had a chance to travel to the EU or Switzerland. Even when travel took place, they were limited and with a lot of risks. EU and Switzerland instituted strict measures for travelers from countries listed as "red" zones, in which Kosovo was included during the summer of 2020. Wood processing company representatives reportedly face daunting procedural challenges to travel by plane to Europe. Most travel reportedly occurs either through transportation trucks, cars, or buses, with the latter two taking place on a limited basis. The only event in the last six months that the wood processing industry participated in and traveled to was in Turkey in September 2020, for a furniture fair.

3.2 INFORMATION AND COMMUNICATIONS TECHNOLOGY

3.2.1 SECTOR OVERVIEW

Information and Communication Technology (ICT) is transforming economies, public sector service provision, and society at large globally. The trend towards digital transformation has made the ICT sector, startups, entrepreneurship, innovation, and digital economy promotion a top priority on the agendas of many governments. The market for ICT services is huge – global ICT spending reached €3.94 trillion in 2019 and is expected to grow to €4.66 trillion by 2023. Ranking as one of the largest industries in the world, the ICT market's continuous growth serves as a testament to the ever-increasing prevalence and importance of technology in modern life. With its technology enabling its own innovation while spurring innovation in all other sectors, ICT is a central driver of economic growth and innovation in all advanced economies.

Similarly, ICT has started to play an increasing role in Kosovo's economic growth. As stated in the Kosovo IT Strategy,[3] the ICT sector in Kosovo, despite its relatively limited share of overall economic output, is one of the most developed and promising sectors for generating economic growth. Given its potential, the Government of Kosovo has recognized and listed the ICT sector among the top six priority sectors that contribute to economic development. The sector offers strong promise for generating new jobs for young men and women entrepreneurs, as well as for increasing the overall level of the country's exports. As such, the ICT sector, including the full range of electronic communications and information society services, is poised for immense growth and is likely to become one of the most important service sectors in Kosovo's economy. The ICT sector can, and should, play a vital role in helping Kosovo develop a dynamic, knowledge-intensive, and globally connected economy.

Today, despite its challenges, the ICT industry in Kosovo generally constitutes a vibrant sector of the economy in its own right, providing a major source of employment, contributing a significant share of the Gross Domestic Product (8%-11% of GDP over the last 6 years), and serving as a catalyst for the creation of a highly skilled "knowledge economy" workforce.[4]

For the purposes of this analysis, the ICT market system in Kosovo consists of three separate sub-systems, oriented around three distinct functions:

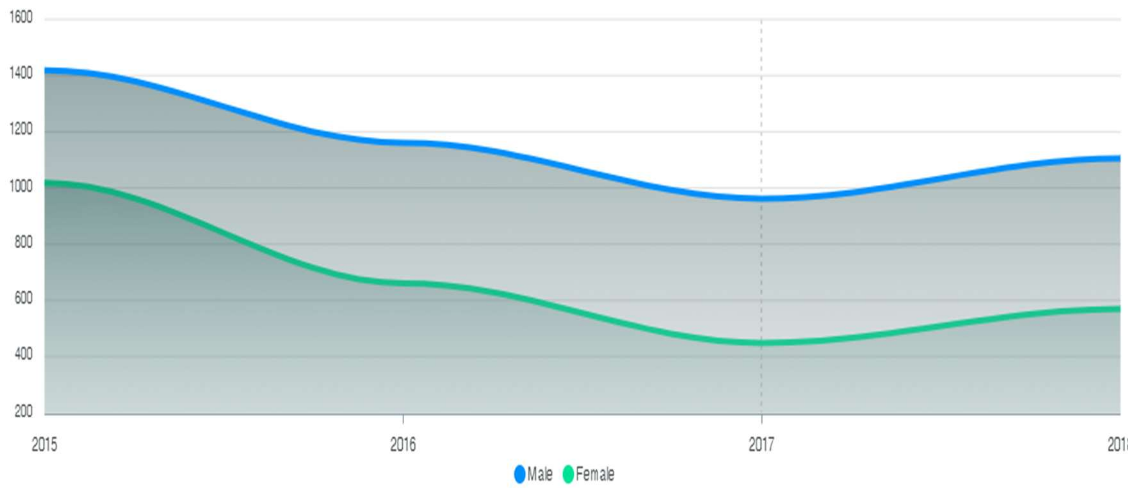
1. **Software development**: including the design and creation of software applications, mobile applications, related processes, and management of networks and computer centers;
2. **Digital services**: including building web and mobile presence, design, 3D, video, CAD/CAM, digital marketing, credit rating, market intelligence collection and other services; and
3. **Business Process Outsourcing (BPO)**: including call centers and support desks, financial transaction processing, and human resource management.

The ICT industry is of strategic importance for Kosovo's economic and social development for several reasons:

- **Contributes to economic growth:** Several countries, such as Bulgaria, Estonia, Serbia, India and Costa Rica have shown the significant potential of the ICT industry as a trigger for economic development, job creation, and income generation. Considering the structure and the competitive advantages of Kosovo's ICT industry (such as 10-15 people agile teams, competitive pricing, quality, language skills, and technical know-how), the country has the potential to follow the example of these countries by using the ICT industry as a catalyst for economic growth.

3 https://stikk.org/wp-content/uploads/2018/11/Kosovo_IT_Strategy_V01-00_29-06-2016.pdf
4 Republic of Kosovo – Government of Kosovo - Ministry of Economic Development – Electronic Communication Sector Policy – Digital Agenda for Kosovo 2013 – 2020.

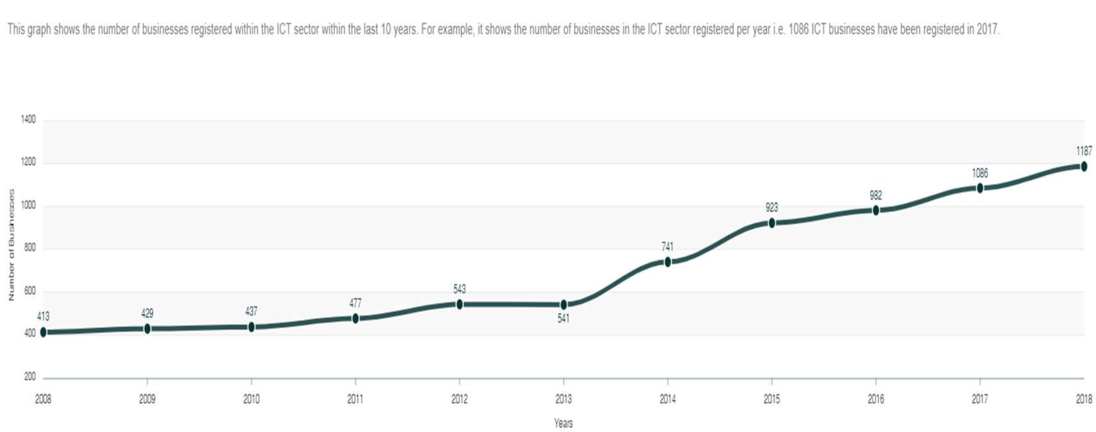
Figure 7: Number of high school graduates in ICT



Source: Open Data Kosovo

- **Generates significant employment:** The positive effect of the ICT industry on job creation is amplified by the fact that ICT is both a labor-intensive and skill-intensive industry. In the ICT industry (particularly in software development and BPO), scale is achieved by qualifying and hiring more people. In terms of employment, the ICT sector development has two positive effects: a quantitative one by increasing the number of jobs (more than 1,000 companies registered per year, on average, in Kosovo Business Registry Agency over the last several years) and a qualitative one by generating higher paying employment for higher skilled people (average monthly salary in the ICT sector in 2018 was €717 Euros).

Figure 8: Number of businesses registered in the ICT sector within 10 years[5]

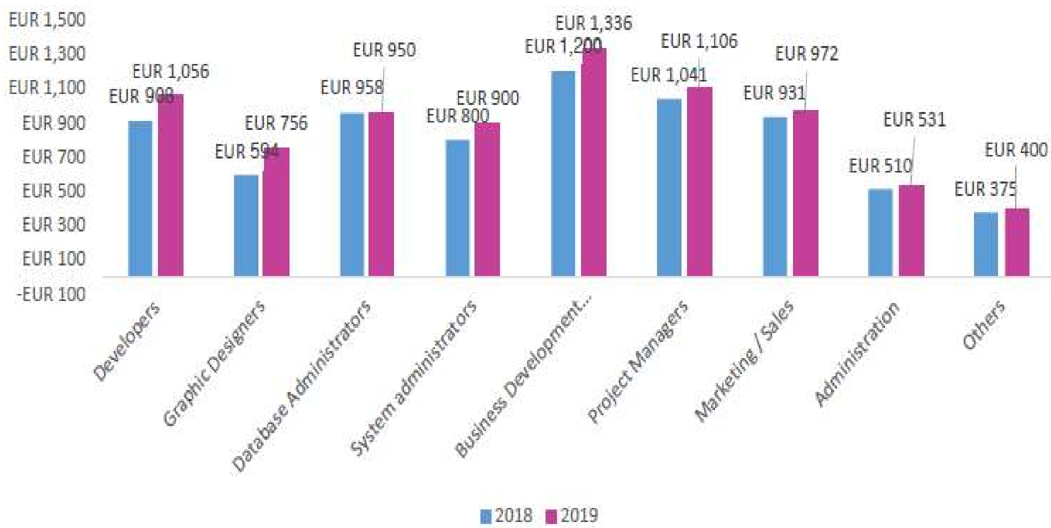


Source: Open Data Kosovo

[5] This graph shows the number of businesses registered within the ICT sector within the last 10 years. For example, it shows the number of businesses in the ICT sector registered per year i.e. 1086 ICT businesses were registered in 2017.

- Sector association STIKK estimates that the sector employs around 3,000 workers, but when considering the BPO sector, the overall estimates can reach as high as 10,000 employees. According to NGO Open Data Kosovo, by the end of 2018, there were a total of 7,762 businesses registered in the ICT sector. Most of the firms, roughly 88%, are Kosovo-owned; approximately 3% are in equal partnership with foreign partners; and about 8% are foreign-owned. Most owners are younger than 50 years old. Kosovo's ICT sector could play an important role in reducing unemployment, especially among youth.

Figure 9: Average monthly salary in ICT sector 2018-2019



Source: Kosovo IT barometer 2019 - STIKK

- **Promotes export of services:** The global market for ICT is projected to grow rapidly in the next few years, thus providing significant export growth potential for Kosovo. Severe skill shortages in the ICT industry, particularly in northern Europe, will translate into additional demand for ICT outsourcing, largely to nearshoring destinations such as southeast Europe. Increasing exports is especially important for Kosovo, due to its negative trade balance and comparatively small, underdeveloped domestic market. Growth of ICT exports will provide several long-term benefits for Kosovo, such as speeding up the transformation to a knowledge-based economy through technology transfer and creating better, higher-paid jobs.

- **Promotes competitiveness of other sectors within Kosovo**: A significant economic benefit of the ICT industry is its positive impact on the efficiency and productivity of other (cross) industries through spillover effects. Thus, even traditional sectors of Kosovo's economy such as manufacturing, agriculture, or tourism could improve their international competitiveness by using modern software applications and ICT services. By adopting the latest technologies and providing modern software applications, Kosovo ICT companies can support the integration of SMEs into international markets and supply chains. Hence, in this view, ICT becomes an enabler for other industries. Furthermore, the ICT industry can induce growth effects in related industries through multiplier effects and provide opportunities for so-called hybrid business models, combining products with specialized services. Given the ongoing digital transformation of national economies and the emergence of Industry 4.0,[6] ICT will have a major impact on the international competitiveness of Kosovo's economy.

Figure 10: Comparison of ICT companies in municipalities by activity[7]

Source: Open Data Kosovo

- Promotes **innovation and knowledge-intensification within Kosovo**: As a crosscutting technology, ICT is a driver of product and process innovation. Furthermore, ICT plays a key role within the knowledge-based economy, where its strategic importance will substantially increase due to mega-trends such as Internet of Things (LoT) and the so-called Industry 4.0. Accordingly, IT could play a crucial role in increasing the capacity for innovation of Kosovo's economy. In addition to that, the IT sector could also serve as a catalyst for entrepreneurship and the establishment of a vibrant start-up scene. A case in point is the Innovation Center Kosovo (ICK), which impressively demonstrates the potential of the ICT industry for entrepreneurship and innovation.
- Builds **Kosovo's international image**: Promoting its ICT industry could help Kosovo to further improve its international visibility and position itself as a center of digital excellence, ICT entrepreneurship, and innovation, following the example of small, yet highly innovative and competitive nations such as Estonia, Lithuania, or Singapore. Kosovo would then be able to diversify its "industrial image" in terms of technology, capabilities, and quality. In addition to that, the Kosovo ICT industry would serve as a brand ambassador for the Kosovo economy.

---

[6] https://www.forbes.com/sites/bernardmarr/2018/09/02/what-is-industry-4-0-heres-a-super-easy-explanation-for-anyone/#52bf27c9788a

[7] This graph shows the percentage of ICT businesses that are engaged in different activities categorized by Municipalities. One block represents the percentage of businesses that are engaged in one specific activity in a specific Municipality.

- Attracts **investment**: Emerging countries with strong national ICT industries usually do better at attracting foreign direct investment (FDI). Thus, promoting the Kosovo ICT industry could help boost the country's appeal to foreign investors and attract more FDI by improving its image, its technical and skill base, and its business climate.
- Other **strategic benefits**: Improving the international competitiveness of the Kosovo ICT industry would also have a positive impact on Kosovo's economy and society at large in areas such as good governance (e-government, open government, and open data), social development (information society), education and science (IT skills development, e-learning, IT R&D), health (e-health), and sustainable energy (e-energy).

The available data on Kosovo's ICT sector is mainly produced by STIKK, KBRA (MTI), KSA and donor funded projects covering the Western Balkans. However, these data do not provide sufficient information on the overall impact of the ICT industry on economic growth and employment, exports and imports, products and/or services, expenditures in the ICT sector, or public funding. So far, the following sources of data are available in Kosovo:

- IT barometer Kosovo[8]
- Survey on usage of ICT in Kosovo[9]
- Eurostat data[10]
- Statistics published by Open Data Kosovo[11]
- International donor project assisted surveys and analysis

Lack of qualified and validated data sources and information makes it difficult for all relevant stakeholders to have reliable and accurate information on the current and past state of the ICT sector in Kosovo.

According to the 2019 Kosovo IT barometer,[12] 61% of ICT companies reported exports of their services and products. However, it is not only the growth of exports in the ICT sector (ICT service exports in Kosovo were reported at nearly €60 million in 2017, according to the World Bank development indicators,[13] compiled from officially recognized sources) itself that will lead to sustainable economic growth, but also the application of digital solutions (digital transformation, digitalization, and automation of processes) in the wider economy (e.g., energy supply, finance, agriculture, retail, hospitality).

---

[8] The IT barometer aims to collect basic information only on ICT companies. It focuses on exploring the following issues related to the IT sector in Kosovo

[9] KSA - In 2019 KAS published second publication with the results of the ICT 22 Survey for 2018. The focus of this survey is rather narrow because it collects information on the use of ICT throughout the territory of the Republic of Kosovo by households and individuals of the age group 16-74 years old.

[10] Eurostat in 2019 published a leaflet "Basic figures on enlargement countries ". This leaflet presents the most recent Eurostat data on a small number of key indicators in the economic and social fields for the enlargement countries.

[11] In October 2019 "the Future Workplace16" is lunched, which is a data-driven digital tool developed to declutter the ICT market in Kosovo, which has powered by Millennium Foundation Kosovo and is implemented by Open Data Kosovo and Kosovo Chamber of Commerce.

[12] https://stikk.org/wp-content/uploads/2020/01/IT-Barometer-2019.pdf. It should be noted that this survey consists of a sample of only 38 companies, so this data should be taken as illustrative but not precise. The lack of reliable data on Kosovo's ICT industry is a significant constraint to improving policy, donor and association support.

[13] https://tradingeconomics.com/kosovo/ict-service-exports-bop-current-us$-wb-data.html

Figure 11: CBK data on ICT services exports[14]

CBK Data on Computer Services, Information Technology and Telecommunications Services Export and Imports (in millions of Euro's)			
	Balance	Exports	Imports
2009	€ 56.83	€ 72.47	€ 15.64
2010	€ 45.36	€ 79.67	€ 34.31
2011	€ 76.78	€ 96.86	€ 20.08
2012	€ 47.40	€ 70.40	€ 23.00
2013	€ 32.05	€ 59.76	€ 27.70
2014	€ 19.46	€ 77.68	€ 58.22
2015	€ (1.00)	€ 54.82	€ 55.82
2016	€ 2.57	€ 48.44	€ 45.87
2017	€ (4.77)	€ 46.57	€ 51.33
2018	€ (5.28)	€ 55.84	€ 61.11
2019	€ 20.00	€ 68.10	€ 48.10
2020 (Q1+Q2)	€ 21.20	€ 37.20	€ 16.10

Source: MTI, Kosovo

Organic growth of the ICT export sector could help create an additional positive edge in the business model of Kosovo's economy, and contribute to economic growth. The World Bank's Kosovo Digital Economy (KODE) project is an initiative that tackles the issue of applying digital solutions in the wider economy, through support for internet connectivity and skills. According to the 2019 edition of Eurostat's "Basic figures on Enlargement countries" publication, in 2018, Kosovo had the highest percentage of households with home-based Internet access in the region (93%).

[14] https://mti.rks-gov.net/desk/inc/media/4F5998B0-0FD5-497D-94B7-301B73A7F647.pdf

Figure 12: Internet penetration in EU candidate and potential candidate countries[15]

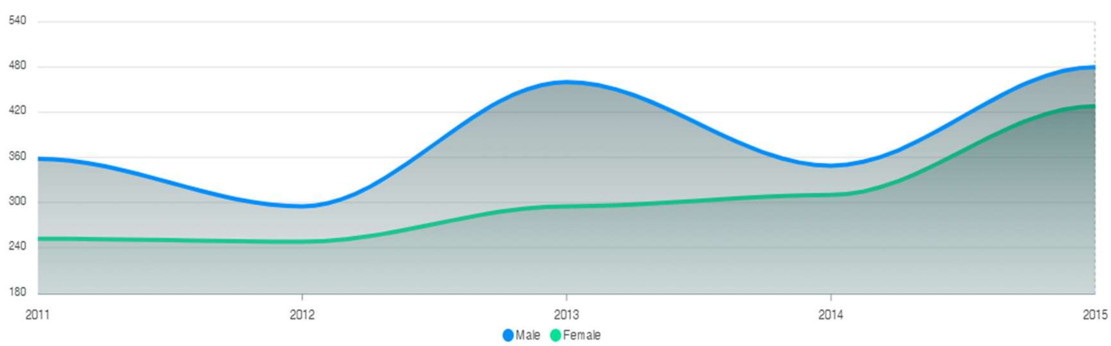
	Percentage of households who have internet access at home (%)					
	2013	2014	2015	2016	2017	2018
EU-28	79	81	83	85	87	89
Montenegro	*56*	*64*	*68*	*70*	*71*	*72*
North Macedonia	65	68	69	75	74	79
Albania	:	24	25	29	30	:
Serbia	56	63	64	65	68	73
Turkey	49	60	70	76	81	84
Bosnia and Herzegovina	:	:	:	62	66	69
Kosovo	:	:	:	:	89	93

Source: Eurostat (online data code: isoc_ci_in_h)

Source: Eurostat

The Kosovo ICT sector faces a shortage of skilled and qualified workers. when asked about the need for skilled/qualified workers, 83% of companies declared that they face a deficit of skilled/qualified workers and 92 % claim that their businesses are affected by brain drain.

Figure 13: Number of university graduates in ICT[16]



Source: Open Data Kosovo

The absence of a consolidated institutional framework for an ICT-based economy (i.e., an umbrella strategic document coordinating actions of the public sector within the ICT area), makes it increasingly difficult for the ICT sector to grow. It also makes actions of public institutions (and also coordination with donors) disparate and lacking harmonization, with significant overlaps and inefficiencies, therefore undermining the creation of a favorable environment for private investment within the sector.

[15] Basic figures on enlargement countries 2019 edition – Eurostat- www.t.ly/ENeN
[16] https://thefutureworkplace.org/en/stats

3.2.2 MARKET LINKAGES AND END MARKETS

By 2019, the global business process outsourcing (BPO) industry has grown into a €489 billion global industry, with significant emphasis on three broad areas:

1. Logistics, sourcing, and distribution services;
2. Information technology services, including the creation of software and the management of computer centers; and
3. BPO areas such as call centers, financial transaction processing, and human resources management.

In 2018, turnover in the IT-outsourcing market in Europe was projected to be €76 billion. This is expected to grow to approximately €83.1 billion by 2021, representing a compound annual growth rate (CAGR) of 3.4%. Some industry experts even expect a bigger growth rate of 8% to 12% per year during the coming years.

According to CBI,[17] the biggest (in export volume and services requested and contracted) outsourcing markets are in Western Europe, led by the United Kingdom, Germany, and France. The fastest growing markets are in northern Europe, with Norway showing the fastest growth and Sweden being the biggest market in this region. Based on Statista, a leading statistics database, companies in the UK close the highest number of ICT outsourcing deals in Europe, and of the highest values, closely followed by companies in Germany.

Western, northern, and parts of southern Europe are continuously facing a shortage of skilled IT experts and are increasingly demanding outsourced services. While traditional IT services are declining (approx. by 4% per year), the use of disruptive technologies (such as -artificial intelligence, virtual reality, Internet of Things, and machine learning) is growing. Due to these new technologies, the market is very dynamic and innovation driven, but is in desperate need of a skilled workforce and/or business process and software development outsourcing services and nearshoring companies.[18]

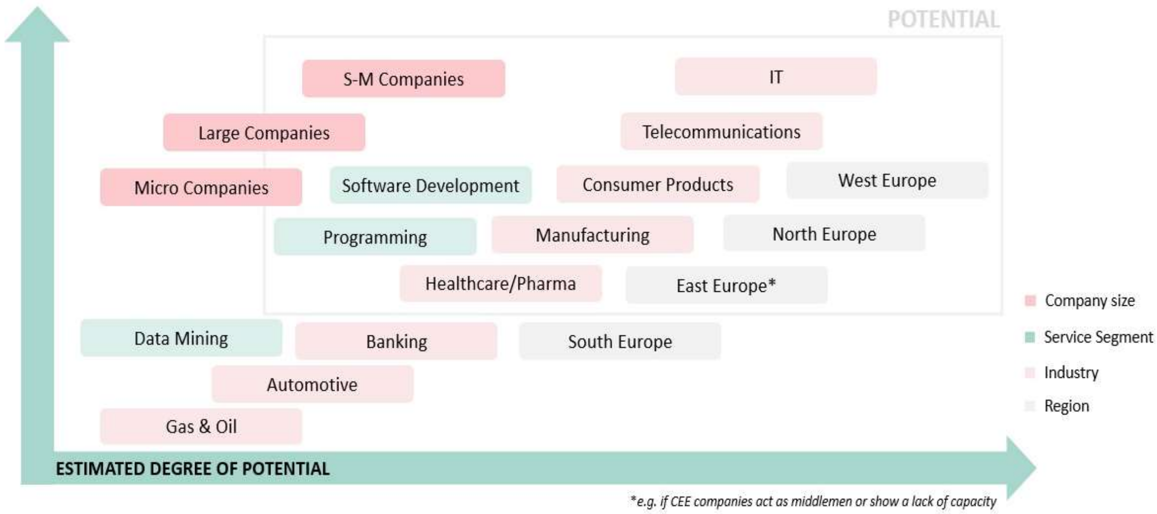
Companies in the UK, France, and the Netherlands already show strong ICT collaboration experience with outsourcing servicing companies. Software development and programming segments are demanded throughout Europe, and specifically in niche technologies and segments (such as cutting-edge technologies, artificial intelligence, virtual reality, Internet of Things, and machine learning).

Collaboration with small- and medium-sized companies abroad offers the best potential for market entry for Kosovo firms. European companies prefer to work with smaller, specialized companies. Smaller projects, pilots, and free trials offer strong potential for networking and building up references. Collaboration with local middlemen (diaspora) or intermediating teams, bridge geographic distances and create a feeling of trust and needed proximity.

[17] Centre for the Promotion of Imports from developing countries
[18] https://www.cbi.eu/market-information/outsourcing-itobpo

The figure below shows an analysis of high-potential market segments, including industries, company sizes, geographies, and services/products.

Figure 14: : Overview on the analysis on high-potential market segments, incl. industries, company sizes, geographies and services/products



Source: Centre for the Promotion of Imports from developing countries (CBI)

3.2.3 SOFTWARE DEVELOPMENT MARKETS

The biggest software development markets served by Kosovo companies are in Europe – primarily the DACH countries (Germany, Austria, and Switzerland), Norway, and Sweden – and North America. The demand from DACH buyers and Netherlands/Turkish/Scandinavian buyers is mostly focused on resource augmentation, as well as building small pieces (modules) of specialized software solutions. In some cases, these services are linked to a specific service in the overall lifecycle of the solutions provided to a certain industry/client. In the US and Canadian markets, most Kosovo companies deliver services related to custom software development projects, such as development of customized software solutions for different industries (e.g., healthcare, security and safety, logistics, operations and management, real estate, ed-tech). Also, this market has high demand for resource augmentation and body leasing.

The key resources needed to conduct business in software development are:

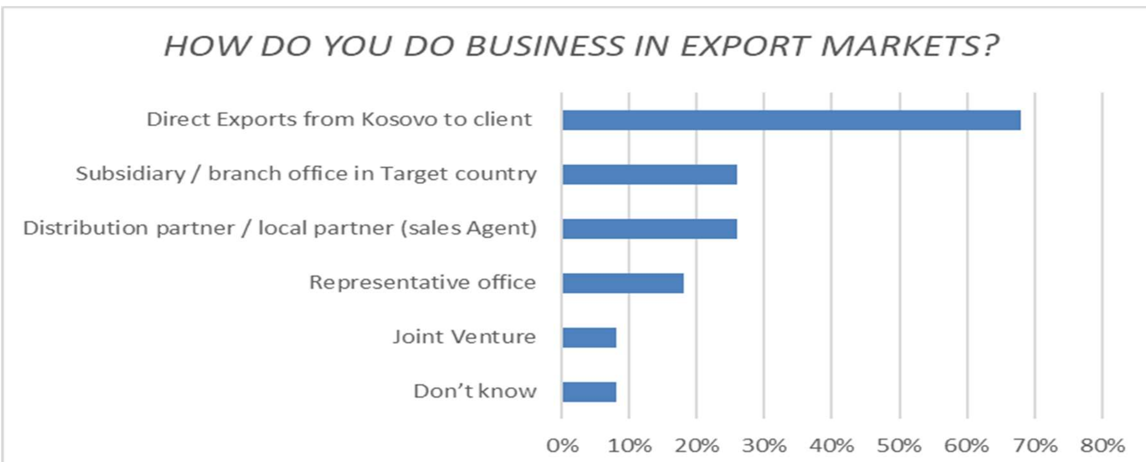
- Middle-tier management capacity
- Software engineers
- UI and UX engineers
- Digital project managers
- System engineers and quality assurance staff
- Internal training programs
- Business development and sales
- Tech business development partners

- Office space
- Digital infrastructure, security services, and reliable internet

For Kosovo businesses trying to enter this market segment, it is important to have access to information on the specific staffing requirements, so that firms can find and recruit required resources. This information includes key competencies, language, and technical skills of the potential employees. They also need to have a good understanding of the clients' business models, channels of communication, and knowledge of key companies in the specific markets requiring software development services.

Kosovo ICT companies engage multiple methods for doing business with international companies. By far, the most popular method is direct exports from Kosovo to client abroad (68%). Other firms are doing business through a subsidiary/branch office in the target market (26%), through a distribution partner/local partner (sales agent) of another firm (26%), with a representative office (18%), or as part of a joint venture (8%).

Figure 15: Channels of doing business in export markets



Source: Kosovo IT Barometer 2019 - STIKK

3.2.4 DIGITAL SERVICES MARKETS

Similar to software development, the main markets for digital services are in Europe (most commonly DACH countries, Norway, and Sweden), North America, and, on a smaller scale, South America. The services provided include web design, webpages and portals, e-commerce portals and solutions, mobile app development, design templates, widgets and plugins, digital marketing services, social media management and advertising, video and animation production, and digital solutions.

The key resources needed to conduct business in digital services are:

- Middle-tier management capacity
- System engineers and quality assurance staff
- Designers / video / animators

- Digital project managers
- Brand managers
- Content writers and editors
- Translators
- Internal training programs
- Business development, operations, and sales
- Tech business development partners
- Office space
- Digital infrastructure, security, and reliable internet

For Kosovo businesses trying to enter this market segment, it is important to have access to information on key resources required, key companies in the market, and an understanding of the business models and channels of communication.

3.2.5 BUSINESS PROCESS OUTSOURCING MARKETS

The main BPO markets for Kosovo firms are in Europe, primarily in DACH countries. North American clients are mostly in Customer and Technical support, as well as in infrastructure consultancy and client support. The services being offered include network infrastructure support, project management, technical and customer support, telemarketing, and call centers.

The key resources needed to conduct business in BPO are:

- Middle-tier management capacity
- Call center operators
- Software engineers
- Digital project managers
- System engineers
- Networking engineers
- Internal training programs
- Business development and sales
- Tech business development partners
- Office space
- Digital infrastructure, security and reliable internet

Similar to the other areas, the information most useful to Kosovo businesses trying to enter this market include information on staff skills needed to perform contracted duties, information on key companies seeking BPO services, and information on business models and channels of communication.

Figure 16: Share of 38 surveyed companies indicating which horizontal markets they provide services to

	DOMESTIC MARKET	EXPORT
BUSINESS INTELLIGENCE / DATA WAREHOUSING	13%	8%
BUSINESS PROCESS OPTIMIZATION	13%	34%
CORPORATE SECURITY	8%	3%
CUSTOM DEVELOPMENT / OUTSOURCING	11%	42%
CUSTOMER MANAGEMENT (CRM)	3%	26%
DOCUMENT MANAGEMENT	18%	3%
E-COMMERCE	13%	26%
EMBEDDED ENGINEERING AND DEVELOPMENT	3%	11%
ERP / SUPPLY CHAIN	8%	11%
IT CONSULTING	8%	32%
IT PROJECT MANAGEMENT	5%	24%
KNOWLEDGE MANAGEMENT / OPERATIONS	3%	13%
MOBILE SOLUTIONS	5%	24%
NAVIGATION APPLICATIONS	-	5%
NEW MEDIA PRODUCTION (MULTIMEDIA/WEB ANIMATIONS)	5%	5%
PRODUC MAINTANANVE, SUPPORT AND CUSOMIZATION	13%	26%
SOFTWARE QUALITY ASSURANCE	3%	21%
TOOLS/COTS		5%
WEB DESIGN; DEVELOPMENT	11%	32%
CYBERSECURITY SERVICES	-	3%
BANKING SOLUTIONS	-	3%
TOOLS/COST	-	3%

~

Source: Kosovo IT Barometer 2019 – STIKK

3.2.6 ROLE OF DIASPORA

While the ICT sector in Kosovo is less capital-intensive than other sectors, knowledge transfer from diaspora is very important for the development of the industry. This is reflected in the prominence of diaspora in high technology industries of several countries. In addition, diaspora can play an important role in the improvement of business and marketing practices.

Diaspora often act as ambassadors of goodwill for Kosovo, their home country. This can raise the reputation of goods and services from Kosovo. There is evidence, for example, that successful ICT specialists among Kosovar diaspora were important in projecting positive images of Kosovo as a reliable center for ICT services and BPO.

Experts in the European ICT outsourcing sector agree that working with a sales representative or a matchmaker is one of the efficient ways to enter the European market. Personal contacts (through diaspora) and one-to-one selling have proven to be the most effective. Many companies from developing countries (DCs) that are doing business in Europe work with a strategic partner (usually an ICT company or consultancy in Europe with an existing client base). Matchmakers and sales representatives (again diaspora) can help IT companies from DCs to find a strategic partner. Therefore, economic diplomacy and diaspora engagement are of crucial importance as seen and identified by stakeholders.

Kosovo has a strong diaspora in Europe and US/UK, and beyond, and they are involved in ICT research and development, as well as employed in several medium- to large-sized corporations at the global level. Being themselves decision makers, or working closely with ones, is seen as an important factor for building bridges and collaboration with local ICT industry especially in outsourcing, digital services and BPO sector.

Kosovar diaspora plays a critical role in accelerating technology exchange and foreign direct investment in the Kosovo economy. In addition to utilizing ICT to enhance remittance services, diaspora are helping to bridge the digital divide in country origin by incorporating technology transfer into social, economic, and political assistance activities. There are already numerous successful projects initiated or developed by diaspora in collaboration with Kosovar entrepreneurs, engineers, and businesspersons.

Diaspora plays an important role in access to finance as they are frequently the buyers of services, solutions, and products from Kosovo ICT sector. Diaspora also plays an important role as potential investors and partners in Kosovo ICT companies, and establishment of new start-ups. The feasibility of launching a "Diaspora Investment Funds" should be assessed as a means of concentrating and channeling investment sources of Kosovars abroad interested in contributing to development and investing in Kosovo.

As with other sectors, there is a lack of available information about the investment opportunities in the ICT sector in Kosovo and establishment of new information channels is needed. Establishing international network of Kosovar business owners in ICT industry (and beyond) and top-level executives/professionals (and not only in ICT) living abroad, who have an interest in contributing to Kosovo's economic development can be one of many solutions to address this challenge. The collaboration with a local middlemen (diaspora) or intermediating teams bridge geographic distances and create a feeling of trust is another approach.

3.2.7 IMPACT OF THE COVID-19 PANDEMIC

The COVID-19 pandemic is impacting all industries and sectors, including the ICT sector. The impact is not limited to human health; the pandemic has affected every industry economically, and the global ICT sector is no exception.

According to the International Data Corporation (IDC), global IT spending is expected to contract by 3-4% by the end of 2020, considering the "pessimistic scenario," due to the COVID-19 pandemic. While the major impact is expected to be on hardware businesses, including devices, the software and services businesses are also expected to slow down as COVID-19 continues to spread widely. However, the adoption of collaborative applications and cloud services has seen a positive turn followed by technologies such as security, telecommunications, big data, AI, IoT, where the impact seems relatively small.

Even though businesses are grappling with current losses, in the long run, many analysts believe once the world is through the worst of this pandemic, the ICT industry may be stronger than before. Globally, certain aspects of the ICT industry are benefitting from health concerns and social isolation. Some of the more obvious immediate ICT opportunity areas are telework, telemedicine, food delivery and logistics, online and contactless payments, remote learning, and entertainment.

In Kosovo, most of the ICT companies' shareholders, management, operations, and finances were not prepared for what has happened and how the situation with the pandemic evolved from mid-March 2020 onwards. Most of this is due to the lack of quality management standards and practices in place, risk identification, business continuity, and contingency planning. Some of the issues ICT technology companies are facing in Kosovo are not different from what similar companies are facing around the world:

- Companies were forced to meet their existing deadlines with limited workforce, and hence were not concentrating on setting new targets and projects. This, in turn, slowed the growth of the sector and stunted the previously steady and optimistic industry growth.
- Some ICT sector outsourcing companies rely on overseas consumption and development of services and solutions, which has slowed since the outbreak.
- Customers are delaying purchases because the pandemic has impaired an already uncertain global economy.
- A raft of cancellations of industry events, gatherings, and conferences meant fewer business development opportunities. Such events and gatherings offer vital business opportunities to ICT companies to showcase their products and solutions. Cancellation of such events affected forthcoming opportunities for Kosovo ICT companies.
- Sudden loss of demand and revenue induced by the containment measures led to severe cash-flow problems. This threatened and endangered small SMEs' survival, given their limited financial resources to withstand a long-lasting crisis.
- SMEs working in the box-moving and hardware supply sector, dependent on imported equipment, components, and parts required to assemble final products, have encountered and are facing constant supply-chain disruptions.
- SMEs have experienced shortages in labor, having a lower capacity to shift to teleworking and digital work processes in the context of movement restrictions.
- Vastly diminished business travel (meeting prospective clients) resulted in fewer client interactions.
- Technology support (and maintenance) struggles to keep up with increased customer needs on applications and solutions.
- As companies seek business solutions to address remote work, social distancing, and the need for in-store alternatives (e-commerce, web presence, mobile apps, and social media channels), the demand for developers and engineering talent increased. Retaining top talent is becoming an issue and is essential for business continuation.

With the unfolding COVID-19 crisis, Kosovo will need to accelerate digital transformation for private sector development to increase resilience and optimize business processes.[19] The impact of the crisis in the short term—but probably also in the long term—will be shifting the Kosovo economy towards the digital economy. The pandemic has also changed the way organizations manage, communicate, and grow.

In the meantime, the COVID-19 crisis has also contributed to a shift in mindsets of some Kosovo companies. One example, is how it motivated public and private education providers to develop digital trainings. The education and training ecosystem, teaching, and learning have all undergone a fast and immediate transformation showing the importance of blended learning. Education and training providers – formal and non-formal, public and private – have already or are in the process of transition to online training. Most of them are already campaigning for online courses and new delivery formats.

The COVID-19 pandemic has also forced change and adaptation to new business models. Job portals began seeking alternative online revenue models. Online research emerged as a new player in traditional industries. The COVID-19 crisis pushed the research market to think and move towards technology and use more market tools to conduct research.

Recruitment and matching services have immediately adopted new changes in their business models and rapidly adapted to digital human resource services. Affected by government restrictions and new social distancing rules, companies are becoming increasingly dependent on technology to make sure their teams work efficiently. The workforce has changed and continues to change, and employers are changing their "modus operandi," working remotely, and looking to hire more remote or freelance workers.

3.3. FOOD PROCESSING

3.3.1 SECTOR OVERVIEW

Food processing in Kosovo is a relatively untapped sector with significant growth potential, both domestically and externally. Additionally, agricultural output accounts for a relatively small share of the economy's output. According to the World Bank World Development Indicators (WDI), the net output of the "agriculture, forestry and fishing" sector in Kosovo stood at 9.1% of GDP in 2017, declining to 7.2% of GDP in 2018, and 6.9% of GDP in 2019. Moreover, based on the WDI data, the annual net output growth rate of "agriculture, forestry and fishing" was -10.6% in 2018, and -0.7% in 2019. According to Kosovo Agency of Statistics (KAS) data, agricultural and food-related exports constituted 17% of all exports in 2018 and 2019 (although it should be noted that the official available statistics in Kosovo are notoriously unreliable).

The food processing sector's competitiveness potential is demonstrated by the fact that it is one of the biggest manufacturing sectors in Kosovo, and the third largest exporter, with a CAGR of 9.4% during the years 2015-2019. Prior to the COVID-19 pandemic, Kosovo government projected the sector to grow by an annual rate of 12%. The growth was expected to be driven by

[19] https://www.helvetas.org/en/switzerland/how-you-can-help/follow-us/blog/inclusive-systems/Digital-Economy-and-COVID

beverages and packaged foods, including mineral and carbonated soft drinks, beer, wine, vegetable spreads, jams, marmalades, purées, and medicinal and aromatic plants (MAP).

Demand from the EU, particularly from Austria, Germany, Sweden, and Belgium, for products such as sweet peppers, ajvar, and sauerkraut, has been steady. There is also potential to meet growing EU demand for organic, ethical, sustainable, and "natural" products, particularly frozen fruit and vegetables; ready-made foods (cleaned, diced, and potentially fresh), vegetarian and vegan products; and MAP products, especially if they are gathered in the wild or organically-produced. There are also several successful examples of exports to the Middle East, with products designed to replace brand-name EU products at a lower price.

As large international retail chains enter the Western Balkans, the demand for private label processed food is growing. Companies like LIDL in the Serbian market, and SPAR in the Albanian and Kosovo market are looking for options to source their private label products. Recently, Uje Rugove, M-Silosi, and Prince Café have been approved to supply fast food chain KFC, and have the potential to expand to other restaurant chains. Kosovo food processors are well suited to meet these opportunities.

It is estimated that the Kosovo food sector consists of over 1,300 companies employing up to 50,000 full-time employees, including farmers who supply the raw materials. The sector has a strong potential for indirect impact on agricultural supply chains. In terms of scale, processed fruits and vegetables have over a dozen large or medium companies that process 9,000 tons of products annually (80% vegetables and 20% fruits).

The sector has a high participation rate by women, and the potential to hire more as it expands. About 62% of employees are women, with smaller firms hiring proportionally more women than men. In addition, many firms are located in minority enclaves, and represent an opportunity for inclusion in the sector and the job market overall.

Food processing association, PePeKo, was registered in 2015 and works to strengthen local processors, access new markets, promote local products locally and internationally and provide analytical support. It has 20 members. It is estimated that it member companies employ 1,284 employees, including 562 full-time employees, 336 female and 226 male, as well as 722 seasonal employees (424 female and 298 male). It is also estimated that the processing capacity of associated companies is ten thousand tons a year. In 2018 the companies processed 5,160 tons, which is at 50% of processing capacities. Key exporting companies include: Frutomania (juices, exports to Europe, and in the Region), Agroproduct (medicinal and aromatic plants exporter), Fungo FF (mushroom producer/processor), Fluidi/Floil (beverage producer, oil processor, exports to Europe), Frutex (energy drinks, fruit and vegetables' export to Balkan countries, EU countries, Middle East, Africa and USA), Eurofood (processing and production of food products: ketchup, marmalade, mayonnaise, preserved vegetables exports to Balkan countries, Germany, Switzerland, and other EU countries, Kamila (confectionary products, export to thirty countries in five continents), Liri (different processed foods, regional exports), and Pestova (potato processor/potato chips). Leaders in the sector are eager to improve competitiveness and reach new export markets.

Another association, ORGANIKA, on medicinal and aromatic plants was established in 2013 and has 34 members. As per a recent study (Birgitt Boor, 2019) there are 7,500 collectors of MAPs and berries, around 700 cultivated farmers and 50 collection centers and ten companies engaged in export. More than 50 species of MAPs and berries come from the wild and from the cultivation. This sector is estimated to employ 315 full-time workers (50% women) and 794 seasonal employees. This also includes an estimated 271 minority employees. This subsector is more than 90% export-oriented with export of €6.3 million in 2018.

According to a 2014 UNDP-commissioned study on food processing, the food processing and packaging sector is mainly comprised of micro enterprises with fewer than nine employees (65%), followed by small companies of 10-49 employees (24%) and medium size companies of 50-249 employees (10%). Micro and small firms employ only 10% of their staff full-time, while medium-sized companies employ 40% of their staff full-time. Large firms employ 60% of their employees on a full-time basis. Eighty percent (80%) of businesses declared to be registered as individual businesses, 9% as partnerships, 8% as Limited Liability Companies, and less than 1% registered as shareholders or international companies.

Based on the so-called Green Report produced by the Kosovo Ministry of Agriculture, Forestry and Rural Development (MAFRD), in 2018 alone, 626 new enterprises were registered in the economic activities section of *agriculture, forestry, and fisheries*, accounting for 6.4% of the total number of registered enterprises that year. The table below presents the data on the monetary turnover of the registered agro-business enterprises for 2014-2018, clearly showing an upward trend.

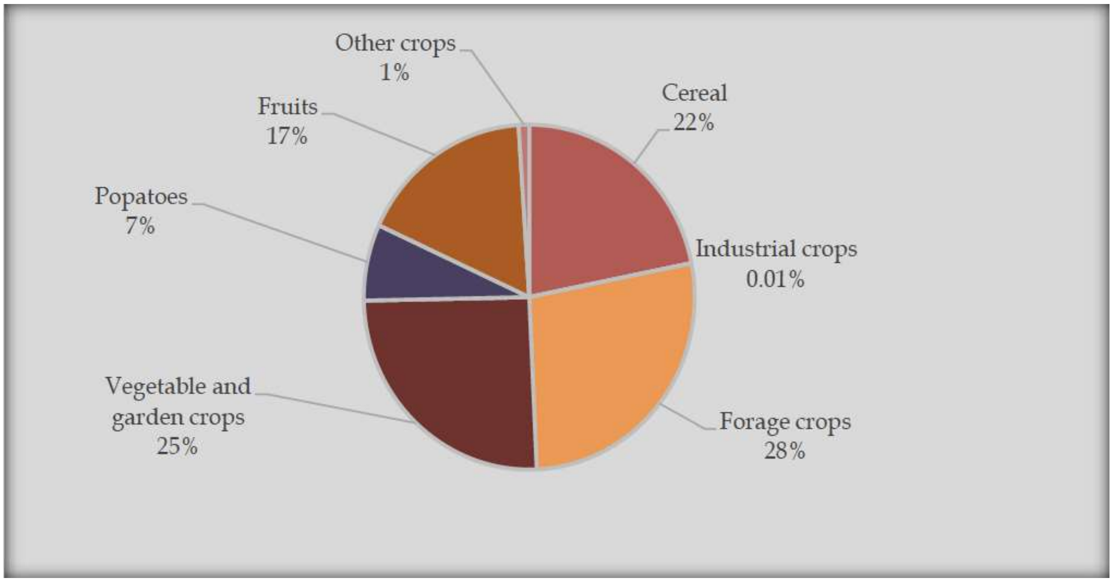
Table 1: Registered agribusiness enterprises, 2014-2018, by turnover and employees

Years	Turnover ('000 €)	Number of employees	Number of active businesses
2014	312,188	8,004	2,055
2015	323,370	8,790	2,130
2016	360,536	10,024	2,314
2017	432,301	10,449	2,398
2018	461,626	13,156	2,942
Average	**378,004**	**10,085**	**2,368**

Source: KAS, processed by DEAAS -MAFRD

According to official government data, out of the total crop production in 2018, vegetables and garden crops, cereals, and fruits are the most dominant by level of crop output. Vegetables and garden crops accounted for 25% of all crop production in 2018, followed by cereals with a share of 22% of the total annual crop output, and fruits which accounted for 17% of total crop production in 2018.

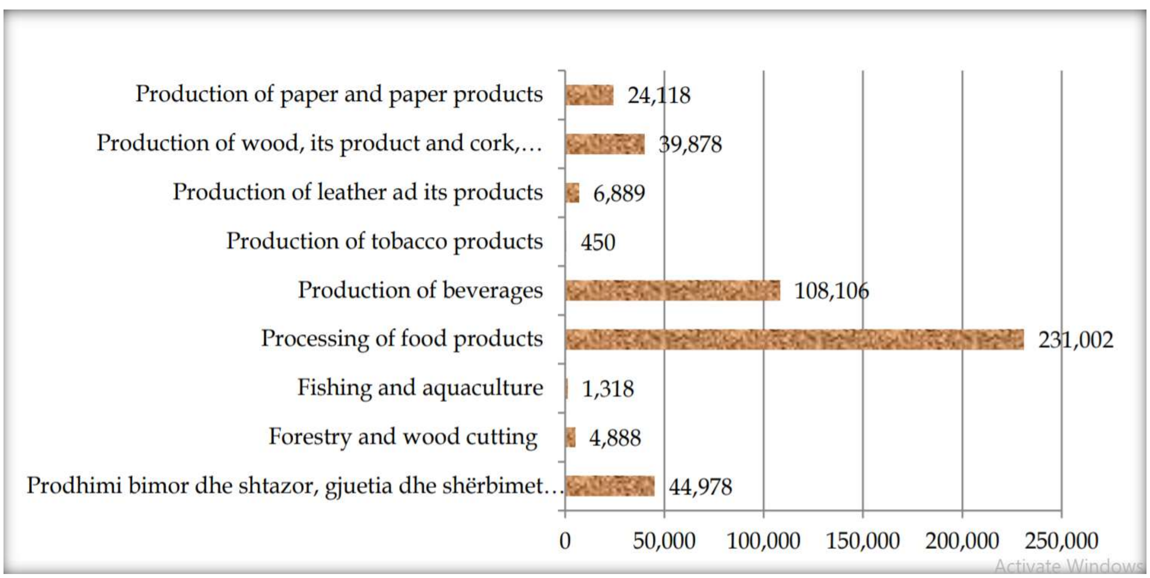
Figure 17: Share of agricultural crops to total crop production in 2018



Source: KAS – Economic Accounts for Agriculture 2008

Prior to the COVID-19 pandemic, some positive trends were noticed in the agricultural sector. The MAFRD Green Report for 2019 indicated that in 2018, financial turnover by agricultural activity was the highest in the processing of food products, which amounted to €231 million, followed by production of beverages, amounting to €108 million.

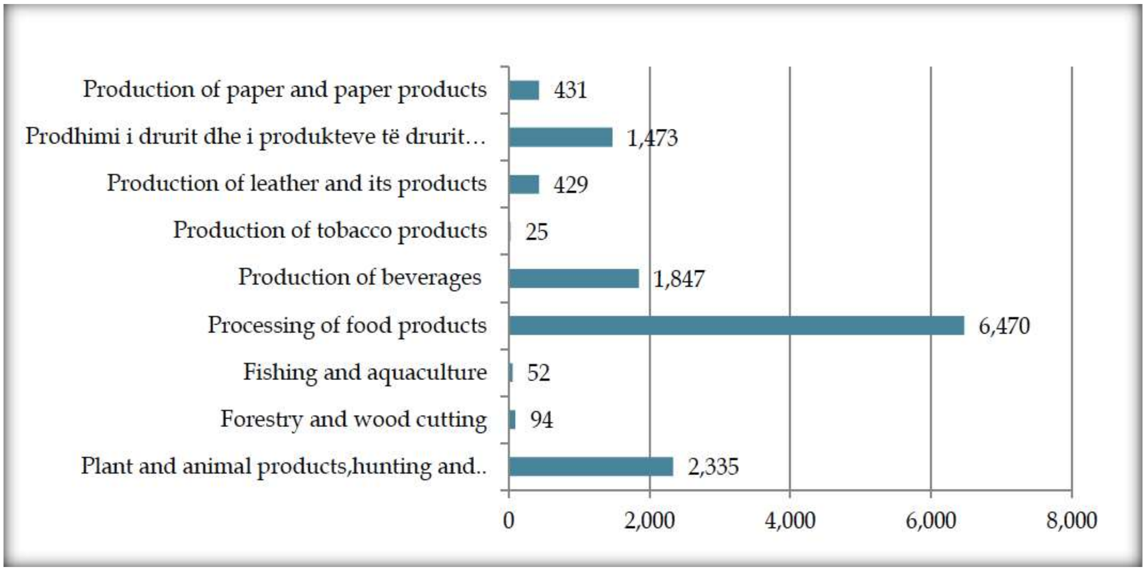
Figure 18: Turnover (€000s) by agricultural activities, 2018



Source: KAS, processed by DEAAS –MAFRD

Similarly, according to the MAFRD Green Report, the total number of employees in the agricultural sector stood at 13,156 in 2018. From this total, he highest number of employees by type of agricultural activity was in the food processing products at 6,470, or nearly 50%. This is followed by beverage processing with the second highest share of employees of 2,335 in 2018, or nearly 18% of total employees in the agri-business sector.

Figure 19: Number of employees by agricultural activities, 2018



Source: KAS, processed by DEAAS-MAFRD

Notwithstanding the clear competitiveness potential of the sector, food processors need to strengthen linkages with farmer producers to ensure a steady supply of market-quality raw materials. Currently, only 4% of cultivated land produces fruits and vegetables, and farmers generally produce fresh market varieties. PePeKo needs to expand its membership to improve sector representation, particularly for legislative and regulatory reforms. Generally, processors lack information about new export market opportunities, particularly for niche markets, for which the Kosovo production system is well-suited. Few companies have Quality Management Systems (QMS) and small companies need to find ways to gain some level of certification and internal QMS.

Different food products are required to comply with different standards. Fresh food products usually should fulfill GlobalGap requirements, but also GMP (Good Manufacturing Practices), GHP (Good Hygienic Practices), GTP (Good Transport Practices), and for more specific markets companies have to comply with Organic Certification and Fair Trade certification, as well as MRL requirements (maximum residual levels for pesticides, food additives, antibiotics, heavy metals GMO, etc.). Depending on market requirements, food processors usually should have in place different national and supra-national standards like: GHP, GMP, ISO 2200 HACCP, IFS, BRS MRL requirements. Even though some food processing companies in Kosovo have adapted their products to target market requirements, they struggle to demonstrate compliance due to many reasons, such as lack of domestic competent certification authorities that are recognized in the export market, and the high cost of using foreign certification bodies. On the other hand, public and private sectors are still weak to provide conformity assessment services (accredited laboratories, certification bodies etc.). Food exporting companies cannot use certificates or laboratory testing documents from domestic laboratories if they are not internationally recognized. Food exporting companies have to obtain internationally recognized certifications from abroad, which adds additional costs.

The food processing sector is in need of a more skilled workforce, including, industrial mechanics, food technologists, trained warehouse managers, agricultural technicians, and food safety, marketing, and sales experts. Universities and vocational educational centers in Kosovo lack programs in food technology. While there are several organic and food standard certification bodies represented in Kosovo, demand for their services is low. The sector has received extensive donor support, and as a result, input suppliers have improved their offerings, collection centers have been established, and advisory services have improved. For example, Agroproduct has 45 collection centers and hundreds of contracted suppliers across Kosovo.

3.3.2 EXPORT TRENDS AND STATISTICS

According to official government data (MAFRD Green Report 2019), the value of agricultural exports increased from nearly €40 million in 2014 to €64 million in 2018. Over the same period, the coverage ratio of agricultural imports by agricultural exports increased by 2.6% (from 6.4% in 2014 to 9% in 2018). Even more notably, agricultural product exports increased as a share of total goods' exports, from roughly 12% in 2014 to 17.4% in 2018.

CEFTA countries were the most popular export destinations for Kosovo agricultural products in 2018, constituting over 60% of total agricultural exports for the year. This was followed by EU countries as the second largest destination, with over 30% of total agricultural exports in 2018 (MAFRD Green Report 2019). Within CEFTA, the largest export market by share of total agricultural exports is Serbia, followed by Moldova, North Macedonia, Albania, and Bosnia and Herzegovina.

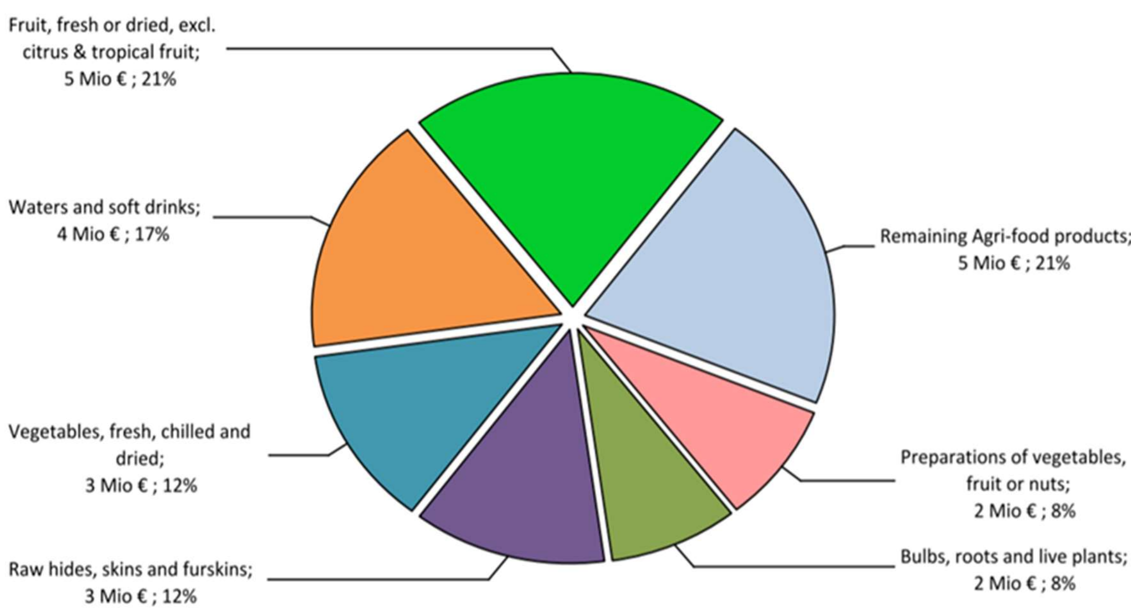
Exports of agricultural products to EU countries have doubled from €10.2 million in 2014 to €20.9 million in 2018 (MAFRD Green Report 2019). Likewise, the share of EU-destined agricultural exports to total goods exports increased from 25.3% in 2015 to 32.7% in 2018. Based on the MAFRD Green Report 2019, Germany was the top export destination of Kosovo agricultural exports, with nearly 40% share of the total Kosovo agricultural exports in 2018. The category referred to as "other EU countries" constituted 32.5% of the total share of Kosovo agricultural exports in 2018. In 2018, 8.5% of agricultural exports went to Bulgaria, and nearly 7% to Croatia.

According to official government data, of the nearly €64 million in agricultural product exports in 2018, €27.5 million, or over 40%, were beverages, spirits, and vinegar. Edible fruits and nuts, peel of citrus fruits and melons constituted around 13% of all agricultural good exports in 2018, followed by export of vegetables and certain roots and tubers at nearly 9% of the total agricultural exports. Additionally, processed vegetables, fruits, nuts or other parts of plants constituted 7% of total agricultural product exports in 2018 (MAFRD Green Report 2019).

Soft fruits (raspberries, strawberries, and blueberries) represent an important cluster of Kosovo's agriculture and food processing sector. Production of soft fruits in Kosovo has intensified during the last decade. According to a market study on soft fruits *("Market Study on Soft fruits in Serbia, Bosnia and Herzegovina, Kosovo and North Macedonia, 2016*"), raspberries are the main soft fruits in Kosovo, having had a very high growth average rate of 2000%, followed by strawberries, which also show a high percentage of growth, and blueberries. There is a trend for organic production of soft fruits in Kosovo. The USAID AGRO Activity, in close cooperation with the national association for raspberries “Mjedra e Kosovës,” has worked on the introduction and implementation of modern production practices and standard certifications. In 2019, Kosovo’s agriculture ministry registered over 1,637 hectares of land cultivated with raspberries, with 7,206 tons of fruit harvested in Kosovo. The export value of Kosovo’s raspberries has grew rapidly in recent years. In 2016, Kosovo exported €6.4 million worth of raspberries (28.7 times more than in 2011). It is estimated that current exports of soft fruits is over €16 million. Kosovo’s frozen soft fruits (mostly raspberries) are exported mostly to the EU countries and are price competitive.

The EU comprises a significant export market for Kosovo’s agricultural exports. Germany and Switzerland are particularly important markets, in part due to the diaspora communities in the two countries. Figure 20 shows Kosovo agri-food exports to the EU in 2019.

Figure 20: Kosovo agri-food exports to the EU in 2019



Source: EU - Agri-food trade statistical factsheet (2020)

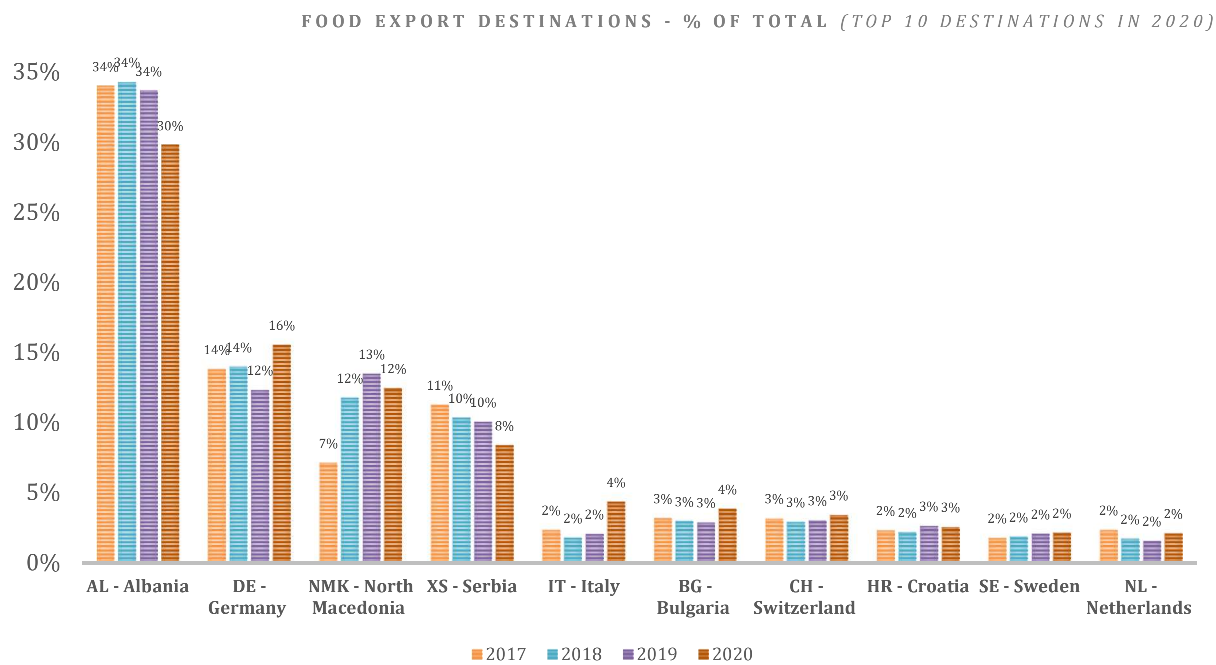
3.3.3 EXPORT DESTINATIONS OF AGRICULTURAL AND FOOD PRODUCTS

Compete analyzed the most recent Kosovo Customs data for 2020. Based on the review of selected product codes,[20] Albania remains a top export destination, comprising 30% of all agricultural exports in 2020 (under the categories specified in the footnote), down from 34% a year before. Germany comes second with 16%, North Macedonia with 12%, and Serbia with 8%

[20] Animal Origin Products; Cereal products, malt, corn starch, inulin, wheat gluten; Coffee, tea, and herbs; Drinks, alcoholic drinks and vinegars; Essential oils and resins, preparations of perfumes, cosmetics and toiletry; Food products from meat, fish, crustaceans, mollusks or other non-vertebrate aquatic animals; Food preparations from cereals, flour, corn starch or mi, bakery products or dough products; Fruits, edible nuts, melon and nut peels; Meat and Meat products; Milk Products, bird eggs and natural honey; Oily fruits and nuts, various fruits and nuts, industrial or medicinal herbs, hay; Preparations from vegetables, fruit or other parts of plants; Sugars or confectionery thereof; Various edible preparations; Vegetables, roots, etc.

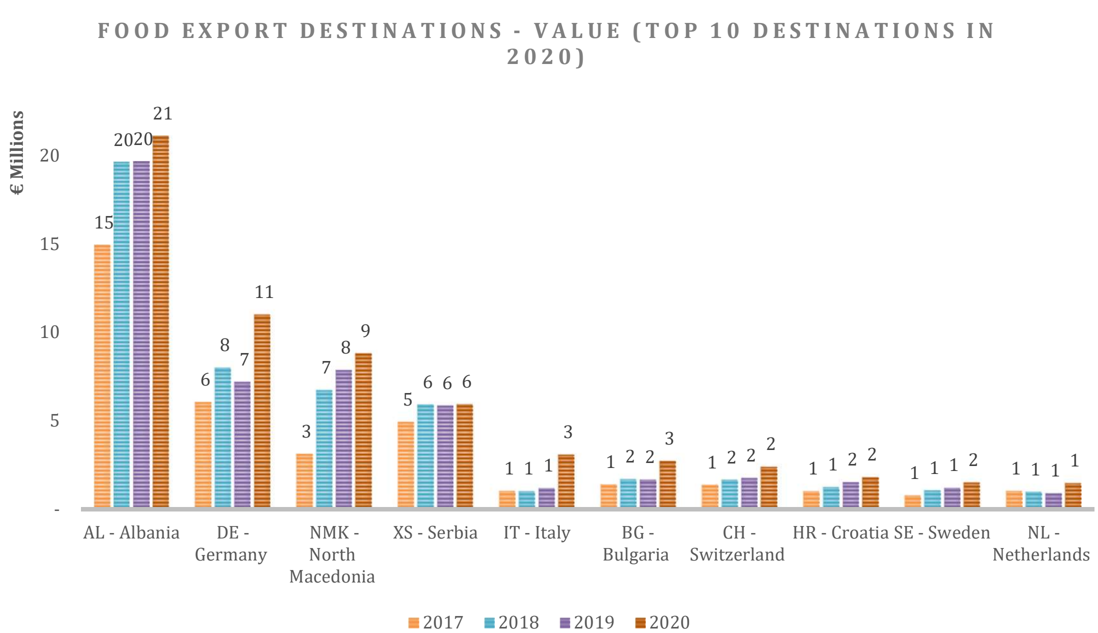
in 2020. In terms of the western countries, Switzerland and Germany lead other markets presumably due to strong diaspora communities. A potentially important issue for the mid-term is potential EU accession of Albania and North Macedonia, which will put further pressure on quality infrastructure improvement and enforcement in Kosovo.

Figure 21: Top country export destinations of Kosovo prepared food exports, by share



Source: Kosovo Customs

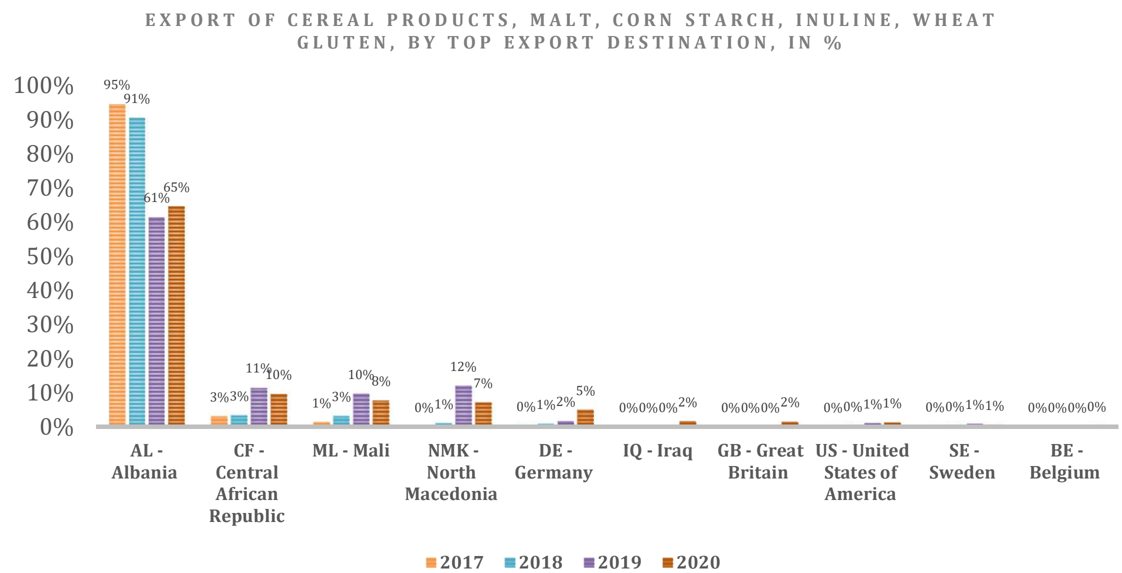
Figure 22: Top country export destinations of Kosovo prepared food exports, by value



Source: Kosovo Customs

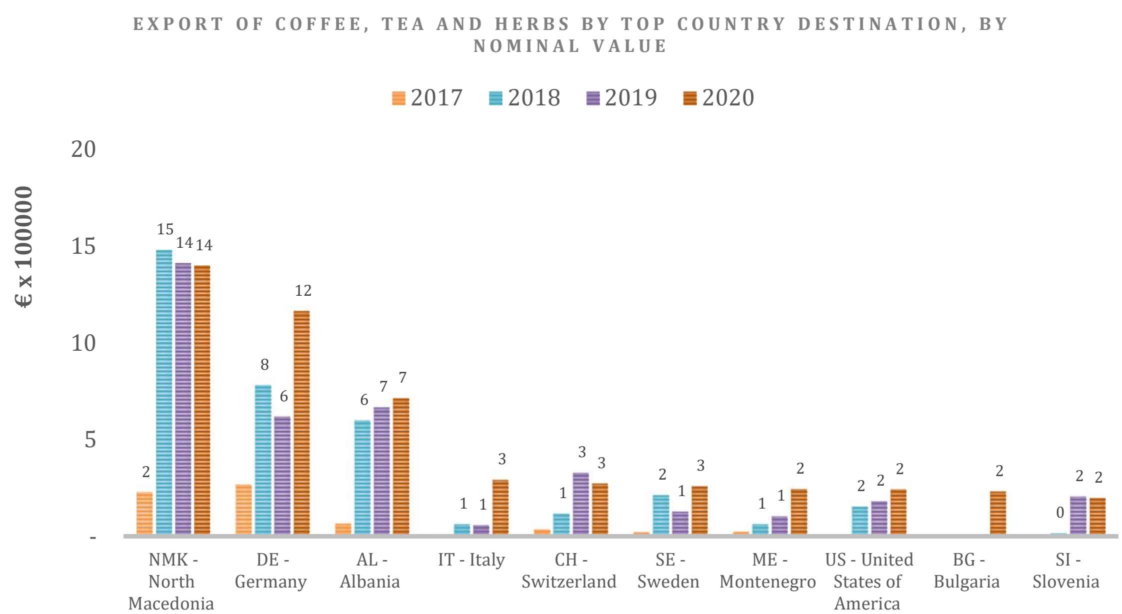
The following charts present top destinations of selected Kosovo agricultural and prepared food exports, by specific Kosovo Customs codes and chapters as noted in the prior page's footnote.

Figure 23: Top export destinations of total cereal products exports ✱, as %



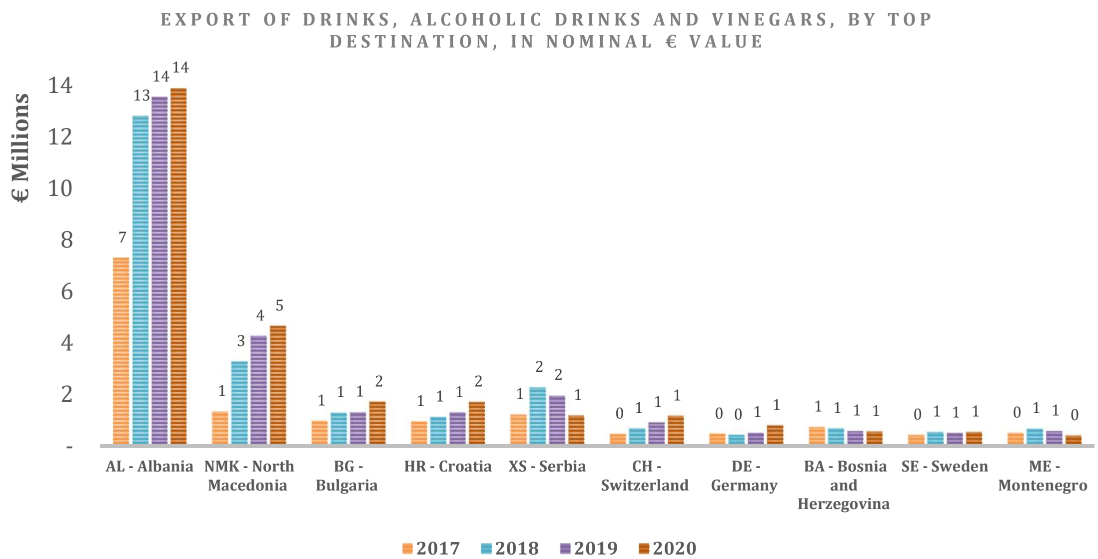
✱Malt, corn starch, inuline, wheat gluten | Source: Kosovo Customs

Figure 24: Top export destinations of coffee, tea and herbs, in € value



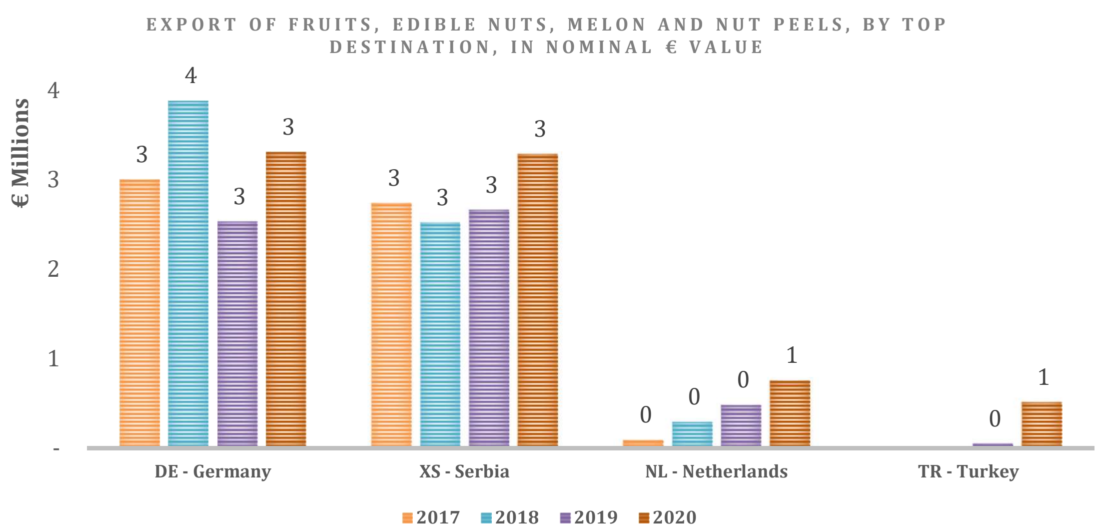
Source: Kosovo Customs

Figure 25: Top export destinations of alcoholic drinks and vinegars, in € value



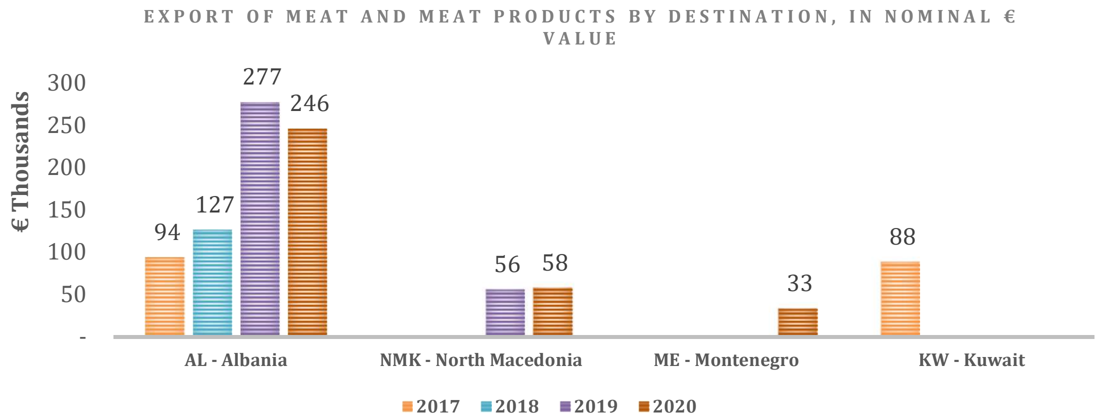
Source: Kosovo Customs

Figure 26: Top export destinations of fruits, edible nuts, melon & nut peels, in € value



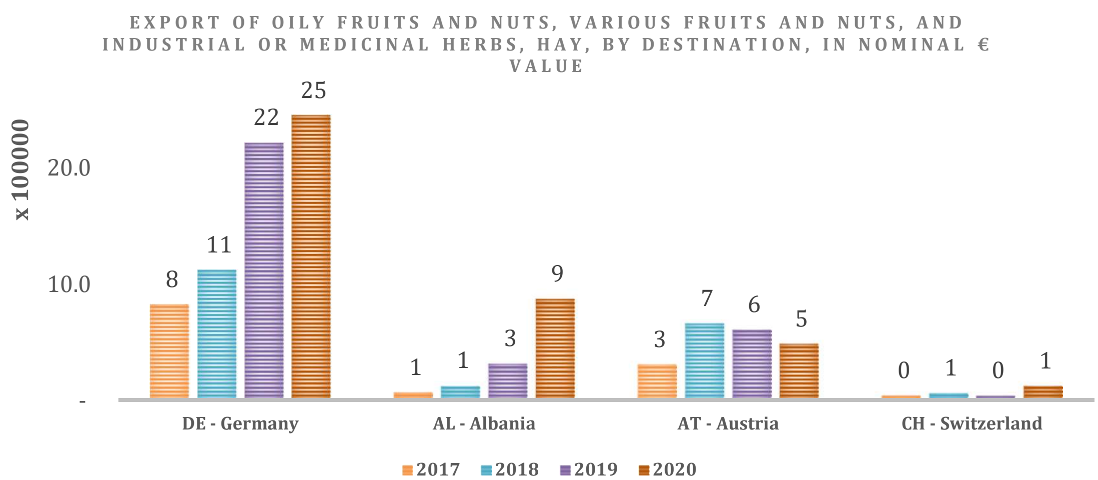
Source: Kosovo Customs

Figure 27: Top export destinations of meat and meat products, in € value



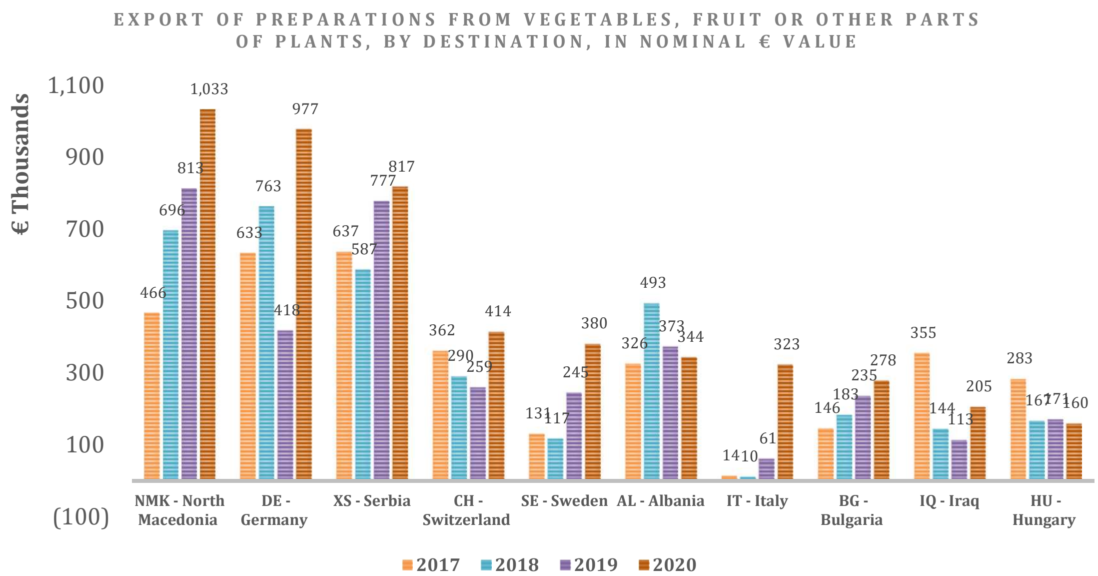
Source: Kosovo Customs

Figure 28: Top export destinations oily fruits et al ✸, in € value



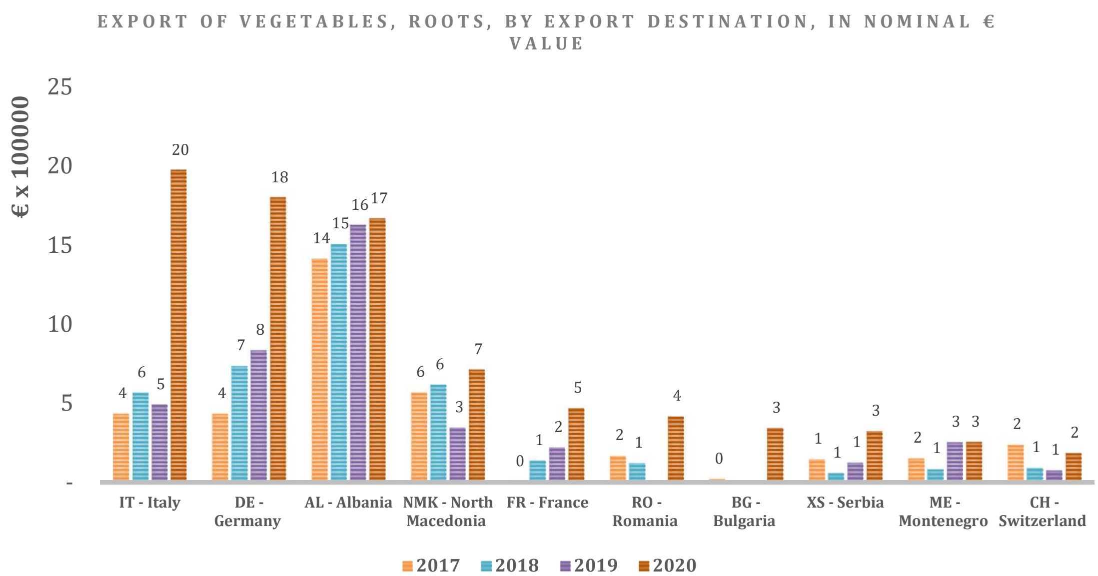
✸ Oily fruits & nuts, various fruits & nuts, industrial or medicine herbs, hay | Source: Kosovo Customs

Figure 29: Top export destinations of vegetables, fruit or other plant parts, in € value



Source: Kosovo Customs

Figure 30: Top export vegetables, roots, in € value



Source: Kosovo Customs

3.3.4 INDUSTRY PERCEPTIONS ON THE COMPETITIVENESS OF THE FOOD PROCESSING INDUSTRY

The Activity team interviewed a dozen companies from various subsectors of the food processing industry as part of the Market System and Constrain Analysis assessment. The local market share of those interviewed ranged from an estimated 5% to as large as 50%. Industry insights from these interviews suggested a growing interest to continue expansion in EU markets, Switzerland, and some markets in Africa and Asia. Two companies operating in the beverage industry export to Senegal, Togo, Guinea, Liberia, Mauritania, Kuwait, Oman, Jordan, and United Arab Emirates.

Interviewed industry actors believe they can compete based on quality, price, and trust. The majority of them characterized their competition in respective markets as strong, and noted about the fact that informal economic activities are a strong impediment to strengthening their competitiveness. Companies use different strategies to compete in their markets and to improve their competitiveness, including focusing on improving quality and identifying market gaps. Some use additional strategies to raise their reputation and consumer standing, such as corporate social responsibility initiatives and sponsorships, and increasing visibility of those efforts among consumers. Marketing plays a big role in the improvement of domestic competitiveness. Many companies promote to customers through social networks, paid media advertisements, buying primary positions in retail for better visibility, brochures, and promotion activities.

3.3.5 ROLE OF DIASPORA

In the food-processing sector, diaspora from Kosovo is mostly engaged in purchasing of home-country products, a practice known as "nostalgia trade". Such trade entails the purchase of goods produced in the ancestral country. Consumption of goods such as food are often distinctive to the country of origin and help diaspora community to nurture and maintain their sense of cultural identity. Such purchases are not driven by economic value or impact, as long as their consumption enables diaspora to gain a sense of familiarity linked to their ancestral roots.

Although there is limited data about the volumes of Kosovo food products purchased by diaspora in their host countries, it is well accepted that such trade flows provide an opportunity for local food processing companies to enter new markets. The main food products that Kosovo's diaspora purchase in their host countries are processed fruit and vegetables, cheese, *ajvar*, different types of jams, paprika prepared with cheese or milk cream, spices, dried fruits, different types of teas, and wine. There is a large community with a migration background and cultural identity in the DACH countries. According to some data there are about 4 million people who migrated to DACH countries from former Yugoslavia, Albania, or Eastern Europe, including Turkey. This is a good potential for the presently produced fruit and vegetable preserves. Currently, Kosovo does not have trade barriers for exports to DACH market, except for products of animal origin.

According to processing companies and migrants from Kosovo, food products from Kosovo are imported, distributed and sold by small businesses owned by Kosovo's migrants themselves, but more often by other businesses owned by migrants from other Balkan countries and by Turkish migrants. With little improvement in labeling the range of qualitative vegetable preserved as pickled and stuffed peppers, cucumbers, pepperonis, red beet, tomatoes, vegetable preserved as *Ajvar* and dried spices could be exported to targeted DACH markets. With changes in packaging size, natural fruit preserves and juices could be also exported in DACH countries. Fresh organic products especially berries from wild collection also have good chances to succeed in DACH markets.

When asked about available sales channels, food processors from Kosovo say that they have food distributors in countries where Kosovo's diaspora is concentrated. There are no available data about demand for food products from Kosovo, distribution networks, businesses and marketplaces offering food products from Kosovo. According to processing companies and migrants from Kosovo, in many cases, food products from Kosovo are imported, distributed and sold by small businesses owned by Kosovo's migrants themselves, but more often by other businesses owned by migrants from other Balkan countries and by Turkish migrants.

The challenges of obtaining accurate information about diaspora role in the Kosovo food-processing sector are in many ways representative of the current state of the industry, which is plagued by issues related to informality, quality control, shipping, labeling and diversification. These challenges also lead to difficulties for diaspora to establish a sustainable supply of Kosovo-made products and also often lead them to have to go to great lengths to find authentic food products from Kosovo.

Albanian diaspora from Kosovo is believed to typically purchase specific food products from their homeland. However, in order to have more insights in this phenomenon, it is important to more precisely quantify the size and impact of this kind of trade. In this regard, migrant survey data like a mapping of businesses or market places (i.e. EU countries, USA, etc.) offering food products from Kosovo and collection of export records would serve as an important tool in better understanding and further development of this promising value chain. It is also important to know the level of information the diaspora from Kosovo has on the availability of food products from Kosovo, including their level of satisfaction with regards to products' quality and variety. It is also important to have a clear picture about businesses in Kosovo that are part of this value chain, market size, varieties, labeling and quality of such products.

What is clear is that food processing sector presents good opportunities for investment, which is supported by a number of studies and demonstrated by several prominent examples. One good example is *Etlinger*, a company run by a Kosovar, who returned to Kosovo after living in Austria. This company processes thousands of tons of canned vegetables each year, including different types of paprika, cucumbers etc. The owner of this company, Mr. Kokollari, returned to Kosovo with experience and knowledge of food processing industry in Austria. Currently, over 80% of products from *Etlinger* are exported to Austria and his company has established sustainable partnerships with Austrian companies. Similar opportunities exist in a number of other diaspora markets.

The lack of data on investment opportunities in the Kosovo food sector creates uncertainty amongst potential investors, which is one of the main issues in the sector that needs to be addressed. Kosovo institutions, in cooperation with the donor community, can initiate interventions in strengthening such value chains: information on market research on migrant consumers and demand for Kosovo's food products; identification of food processing businesses producing on–demand food products; offer business training for food processors (diaspora value chain focus) on foreign market requirements; support trade fairs and sales missions in countries with high diaspora concentration; support diversification and product branding, etc.

Some concrete measures which could promote the food sector in Kosovo as an investment destination include the following: provide information to diaspora business about food processing potential in Kosovo, strengthening the partnership between food businesses in the diaspora with the food processing businesses in Kosovo, creation of investment funds as a part of future financial market, improve regulatory framework with regard to investment in food sector, diversification of products with focus on exports etc.

3.3.6 IMPACT OF COVID-19 PANDEMIC

Companies interviewed for the Activity's MSCA largely retained their wholesale and individual buyers following the onset of the pandemic, but reported a noticeable slowdown in their ability to attract new clients. They also experienced a number of new challenges related to movement restrictions, more time-consuming logistics, and a decrease in demand from the HoReCa sector.

The association of fruit and vegetable processors of Kosovo, PEPEKO, also conducted a limited assessment of pandemic effects on their members. Twelve companies that participated in the PEPEKO interviews reported that sales were most negatively affected, followed by distribution, while production was reportedly less affected. The main declared reason for the decrease in sales among the interviewed companies is the assumption that consumers concentrated on buying essential products. Restrictions imposed by some EU countries also affected exporting companies. When companies were asked about recovery time to return to relative normalcy after the pandemic, most of the companies reported needing at least 4-6 months, but there were also companies that reported needing more than 10 months to recover from the effects of the pandemic. Companies were also asked about the government's emergency fiscal package in the early stages of the pandemic and whether it was adequate for their needs. Companies reported to PEPEKO that it was somewhat adequate at the time but not sufficient to cover their operational losses (salaries, rents, revenue shocks, etc.) caused by the situation. The main concern raised by processors was their need for cash flow in order to source raw material supplies.

In Kosovo's case, sales of food products have reportedly declined because large sections of the diaspora community did not travel to Kosovo during the summer of 2020. Apart from this, sales also declined due to opening restrictions on restaurants and cancelations of weddings and other large parties. Even though no data is available, it is assumed that the food processing sector in Kosovo was also affected because food demand is usually linked to income, and loss of income earnings had an impact on consumption.

Taking into consideration the dynamics of the COVID-19 pandemic, there is a need to support the food processing sector to overcome its lingering effects. Food processors usually contract their supply during winter months, and due to a liquidity crunch they expect to face struggles in contracting and securing sufficient supplies of raw materials. This is likely to further affect their processing capacities in the coming period.

Even before the COVID-19 pandemic, food processing companies in Kosovo faced significant challenges related to availability of working capital. The pandemic is believed to have made this worse. There has been no attempt by the central government to come up with a temporary solution to ease working capital constraints faced by food processing companies. Moreover, no movement has been noted on the part of the government to work with the financial industry to temporarily subsidize interest rates. In the initial months of the pandemic, the government undertook some measures to defer tax payments.

Consumer behavior related to the food processing sector has been affected by the pandemic. Though in the food sector there is no discernable pattern as yet, in general, consumers appear to have increased their reliance on online shopping. For food processing companies in Kosovo, the impact may well be that they will likely gradually accelerate their adoption of digital marketing, online platforms and online sales. Companies should consider this change in consumer behavior, as online shopping and marketing is likely to continue to grow even after the pandemic. Food processing companies may need to restructure their supply chain designs and build online sales infrastructure in order to complement their traditional sales.

The pandemic is also having an impact on consumer preferences. Because of home quarantine and lock-down measures, people are becoming more health-conscious and will probably increase their demand for healthy and safe foods with traceable origins. This is potentially a good opportunity for food processors in Kosovo to upgrade and strongly implement food quality and safety standards. As COVID-19 seems to be more severe among people with pre-existing health conditions (e.g., diabetes and obesity), it may impact consumption patterns. In short, certain segments of the food processing industry may benefit from such consumption behavioral changes and diversify their products and offerings according to new food consumption preferences.